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ABSTRACT

This paper reports studies investigating the effects over time of age and social class grouping in infant day care on the psycho-social development of low socioeconomic status children (primarily black). Adult-child and child-child interactions were assessed in four different types of day care groupings: homogeneous x hetergeneous, age x social class (i.e., 2 x 2) groups. Observations were made of social interactions and task related actions of 80 2- and 3-year-olds during free play and organized work to provide data concerning effects of grouping on caregiving, intellectual stimulation, socialization and peer interaction. (This part of the study was carried out between pre- and posttesting of trust, persistence and intellectual achievement.) Findings indicate that heterogeneous grouping in infant day care settings facilitates the development of trust, assertiveness and autonomous achievement striving in the children enrolled. Heterogeneous grouping also had positive effects on caregivers' behaviors. Results and data analyses are presented. More than 200 pages of tables and appendices are included. (SB)

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Infant Day Care: A Longitudinal Study

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Introduction. The major objective of the present study has been the investigation of the effects over time of age and social class grouping in infant daycare on the psycho-social development of lower class children under three years of age.

The two grouping factors have had a different history in educational research. The issues relating to age grouping have been closely linked to the development of intellectual skills and to achievement motivation. One group of educators have favored grouping school children into more and less gifted ones. The rationale for this position has been that the more gifted children are held back by instruction that has to be geared also to the less gifted ones. The less gifted ones fall back because they cannot keep up with the instruction geared to the more gifted ones in the same classroom and taught by the same teacher. Both groups are said to suffer in their academic motivation. The gifted ones lose interest because the material taught is absorbed and mastered by them quickly and the progress to the next level of difficulty too slow and delayed for too long to keep them engaged in the learning process. Conversely, the slow learners are overtaxed by the pace of instruction. They do not get enough time to master each step well enough to go on to the next step. This results in failure, discouragement and a defeatist attitude toward the whole learning situation. School becomes distasteful to both the bright and the dull. They begin to perceive school as an unpleasant duty forced upon them by adult society. Many children begin to rebel against the demand the teacher makes for attention and effort with the result that the academic learning process is turned into a disciplinary struggle between the child and school authority. The teacher has not enough time and concentration power to instruct and the child not enough motivation and attentiveness to learn.

Many teachers complain that they cannot adequately instruct their heterogeneous group of people because they require too many different levels of instructions to be carried out simultaneously. This added force for homogeneous grouping results both from the training of teachers and their attitudes towards their own work. This disposition of teachers has recently received added impetus by a group of educational researchers who suggest racial links with ability. Jensen, (1969), maintains that developmentally different levels of learning exist in black and white children of the same age. Since children are grouped in school on the basis of chronological age it follows that black and white children do not learn on the same level and require different levels of instruction.

The argument against ability grouping has been as follows. Children need individual attention in thelearning process because learning is an active process. The child learns through the use of his senses and through active manipulation of materials. The mind is not a passive receptable which grows through the accumulation of information received from the outside world. Rather it constructs notions and develops along cognitive lines through a highly individual process which can only be facilitated by the eductor or hindered by an adverse educational environment. The basic steps in cognitive development are universal but every child has its own rate of development. Instruction, therefore, consists of providing material and conditions favorable for use on a variety of levels. Different children in a given group will use the offered opportunities for learning on levels suitable to each. The educator does not transmit the steps in cognitive development. She stands by to assist one or more children when they need help, or information on projects they actively engage in. Children with different levels of cognitive development can work together on projects and assume functions on levels suitable to different children. This method has the advantage that each child is more interested in the learning process in which he can actively participate and in which he can determine his participation on the level of his own functioning ability. The child functioning on a lower level can learn at his own pace from his own experience as well as from his more advanced peer, who may be older, of the same age or even younger than himself. The more advanced child can function on his level, select a lower level if he has a particular reason for doing that, or practice newly acquired knowledge by explaining it to a peer whose assistance he needs or whom he wants to help.

Such an approach places emphasis on shaping the environment so that learning can take place on different levels. The environment is divided into different interest areas so that children can make choices of activities determined by the child's own readiness and interest rather than by extrenal demands which may or may not be suitable for a number of children. Such an approach to education requires thorough knowledge of each child's cognitive processes so as to know when and how to provide assistance and instruction to individual children. However, is she does not have proper training to exercise these functions she will be hopelessly lost and fall back on transmitting what she knows regardless of what the child's level of development is, because she has been trained to select the child for the instructor or instruction rather than selecting the instruction for the child. A properly trained teacher can handle a large group of diverse children. This approach has been advocated and applied by the Montessori method and the British Infant School.

Another important reason advanced by advocates of mixed age grouping is relevant to socio-emotional development, particularly of infants and young children. The young child needs individual attention for his social and emotional development. The family provides an appropriate setting because it has to adapt to children of different ages. Most parents can easily describe differences of their children and the relationships they have with each of their children. Children need such individual attention from their social surroundings to develop trust in others and self confidence, initiative and self-esteem.

The presence of older and younger children in the same group has advantages for the development of socially desirable traits. The older child can practice nurturance, gentleness and can get a sense of his competence when he interacts with the younger, more helpless and more ignorant peer. He has to control his impulses and monitor his behavior so as not to hurt the younger, while he enjoys his or her privileged status of being older. The younger child such as an infant or toddler, is fascinated by older siblings or peers and inspired to learn and engage in developmentally more advanced tasks. The child will be ready to engage in novel experiences. Thus this view holds that caregiving will be more oriented toward individual differences among children, and thereby facilitate greater trust of each child in his own abilities, and greater trust or security in his adult environment.

The issues regarding social class grouping of children in school settings are similar to those of ability and age grouping, although political factors as well as social values have played a more prominent role in that domain. Those in favor of homogeneous social class grouping have argued that lower class children cannot keep up with their middle class peers and are therefore exposed to failure and discrimination. Middle class parents of that persuasion have argued that parents should have a right to choose the school for their children, which they considered desirable. Since social classes are segregated by neighborhood, the desirability of neighborhood cohesiveness among school children in and outside the classroom has been advanced as an argument in favor of homogeneous social class grouping. Proponents of the educational theory of Jensen have held that race and social class is associated with biological determinants of the rate and limit of cognitive development, so that lower class children and black children need different instructional methods at the same chronological age levels. This position has been used as a justification for advocating homogeneous social class grouping. Those who favor mixed social class grouping hold that the lower class child is likely to gain and the middle class child is not likely to lose by mixed grouping; that segregated schools perpetrate class differences by class lines by offering unequal opportunitities on the basis of unequal family background. Differences in cognitive development should not be decided on the basis of social class or family background of a child. All children are entitled to equal educational ooportunities, an important social value in our society.

As will be clear from the review of the research literature the evidence from studies in the United States are inconclusive to date, as it fails to support only one position and it offers no relevant data for children under four years of age.

The present study had several foci as it approached its task of investigating effects of age and social class grouping in infant daycare. Rather than leaving grouping as an abstract variable we decided to carry out an observational study of adult-child and child-child interaction in the four different types of daycare groupings, that is homogeneous x heterogeneous, age x social class, (i.e. 2x2) groups. This part of the study was to be carried out between pre- and post-testing of trust, persistence and intellectual achievement.

This step was taken to provide data concerning effects of grouping on caregiving, educational stimulation, and socialization as well as peer interaction in daycare centers serving children under four years of age. The same data were also to serve as the empirical foundation for understanding and interpreting changes in children associated with age and social class groupings. In the selection of the variables for the observational study we concentrated on sampling situations in which early achievement oriented and early group oriented activities were planned for the children and situations in which children were given free run to express motility or any other needs that would prompt their behavior. In these situations we tried to zero in on child behaviors usually associated with the development of social competence, self-inititative, assertiveness, autonomy and trust in others. With regard to caregiver behavior we attempted to get at (among others), nurturance, control, (intrusion vs. facilitation), teaching style in learning situations, sensitivity to individual differences in children etc. We have tried to assess staff characteristics associated with age and social class groupings in daycare centers. This was important to us because we were not controlling assignment of caregivers to the different types of groups that we investigated. When sampling daycare centers in Philadelphia we discovered that only ten public infant daycare centers could be located that serve only or also lower class children. All but one of these centers agreed to cooperate with our study. We included three more daycare centers from New York City to enlarge our sample.

For the dependent variable, namely change in children experiencing daycare in different types of age and social class groupings we limited ourselves to one measure of intellectual achievement and two measures of socio-emotional functioning. The two best standardized tests of mental functioning of children under four years of age were selected i.e. The Bayley Infant Scales and the Stanford Binet Scales.

We limited ourselves to two variables of socio-emotional functioning because of our small sample of subjects. The two variables were trust in adults and persistence on achievement tasks (or trust in oneself). The choice of these two variables was dictated by two considerations. Since we decided to limit our study to the effects of grouping on lower class children we were particularly sensitive to issues of socialization and education. Lower class black children (that made up almost our entire sample) encounter probelms of socio-emotional adjustment and of academic achievement in school. A very important psychological condition for a child's later socio-emotional adjustement is the trust and security he develops in his adult environment. This variable has been associated with the development of emotional control over fear, frustration, and aggression, dependency-autonomy and self-esteem in much of the clinical and research literature.

An important psychological condition for the child's later academic achievement is his persistence or his capacity to stick with a task of his own accord. This variable has been associated with the development of achievement, competence and cognitive skills in the psychological and educational literature.

To assess changes in these two areas of the child's functioning, situations were constructed which were designed to measure the child's readiness to explore and persist in novel social and achievement oriented experiences, which he encountered in the familiar surroundings of his daycare center and in the presence of his familiar caregiver in that center. Thus our aim was to study the child's developing trust in his daycare surrounding and developing trust in himself to explore novel experiences and to persist in his achievement oriented activities.

A second consideration in the selection of trust and persistence was that the present investigator* had developed and pretested a series of controlled situations to measure these two variables. The purpose of this preliminary workwas to develop instruments which can be used in the evaluation of infant intervention programs, particularly with regard to their impact on socio-emotional development. This prior collaborative effort was supported by the Office of Child Development.

The present investigation constitutes the first application of these instruments for which they were designed. Specifically, for measuring the impact of infant intervention in children under four. In order to enhance the test of these instruments intheir first application we also designed a method for assessing the infant intervention programs themselves which consisted of an observational method for assessing adult-child and child-child interactions. Both the assessment of the infant intervention programs and the evaluation of their impact on the socio-emotional development of Trust and Persistence were placed in the context of the issue of age and social class (ethnic) grouping, two variables whibh have received much attention in educational policy. Empirical data are badly needed to provide a rational basis for decisions on these important issues of social and educational policy. The present study is an attempt to make a step in this direction.

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*Together with several other colleagues, Ira Gordon, Ronal Lally, and Leon Yarrow

OBSERVATIONAL STUDY

Subjects

Subjects for the observational study were 80 two and three-year-old children attending eight day care centers in Philadelphia and New York City. The sex and ethnic breakdown of the sample is presented in Table I. The two-year-olds ranged in age from 20 to 28 months with a median age of 23 months and the three-year-olds ranged in age from 32 to 40 months with a median age of 35 months . All children were from low socioeconomic class backgrounds (i.e. they had to meet the poverty criteria for admission to public day care centers.) The children were selected from fourteen classrooms at eight day care centers (seven in Philadelphia and one in New York City, see Table 2) . All subjects attended full time programs regularly, and each had been in attendance for a minimum of two months before he or she was observed.

Procedure

The Setting: All observations were made in the subject's normal day care classroom. Teachers in the classroom were asked to conduct their programs as usual. Subjects were observed only the regular composition of teachers, aides and children were present in the room. All observations were made in the morning between 8:30 and 11 a.m.

The Schedule of Observations: Each subject was observed for a twenty minute period which was divided into ten two-minute observational-segments. Ten minutes of observation (five two-minute segments) were done during free play situations, (i.e. low structure) and ten minutes during organized work, (i.e. medium structured) dituations. Free play was defined as a situation in which the child is free to choose his own activity. Organized work was defined as a situation in which the child's activity was predetermined by the teacher with a majority of children participating. Observations were not made during transitional periods such as clean-up time, or snack-time.

The Method of Observation. All observations were recorded by trained observers speaking into a small hand-held tape recorder. The observer remained as unobtrusive as possible while staying close enough to the target child to be able to hear his vocalizations and to note his gestures. Observers did not initiate or respond to social interaction with the children during the observations.

The Content of Observation. Observations consisted of descriptions of all social interactions and task-related actions of the child. Also, any actions by other children or adults toward the target child were described. Descriptions of interactions included the following elements: the identity of the initiator of the action, the action, the identity of the recipient of the action, and the affect of the actor. The response to every action was described in the same manner. When any interaction extended over a period of time, the beginning and the end of the activity were recorded.

Scoring Categories: All observed actions were scored according to the categories listed in Table 3. Definitions are contained in the Observer Training Manual. (See Appendix A). Actions were categorized according to four Interaction Schema.

Interaction Schema I orders the 75 action categories listed in Table 3. This Schema is charted in Table 2. It groups the interactional categories according to three segments of the interaction sequence: Approach Actions, In Contact Actions, and Terminating Actions. Each of these groupings was subdivided into: Positive, Negative, Neutral and Mixed Actions. This constituted the first Schema I grouping interactional behaviors under twelve different headings: Positive Approach, Negative Approach, Neutral Approach, Mixed Approach; Positive In Contact, Negative In Contact, Neutral In Contact and Mixed In Contact; Positive

Terminating, Negative Terminating, Neutral Terminating and Mixed Terminating. Task-related behaviors were grouped under three directional categories: Task-oriented, Self-oriented and Non-oriented.

Interaction Schema II is charted in Table 6. In this Schema behaviors were conceptually grouped to generate fewer categories and, thereby, simplify the meaning of results.

The groupings of Approach and Contact in Schema II were collapsed. This constituted the third stage of analysis, Interactional Schema III. The behaviors in both groupings were similar and they were collapsed for purposes of analysis. A list of the identification numbers is given in Table 7.

Coding of Interactional Data

All interactions were scored on coding sheets according to the Coding Analysis and Identification Procedures, (see Appendices B1 - B3). Each coding sheet row contained the following information: the identification number of the subject, his classroom and day care center, four observed actions involving the subject, identification of the situation as low or medium structured, the number of the particular coding sheet row in the two-minute observation.

Each coded action contained six elements. The elements were as described below.

The first element was coded as a single-digit number. It was used to distinguish between the beginnings of a new interactive situation vs. the continuation of a related interaction. The number "1" was used to signify the beginning of a new or interrupted situation; the number "2" signified a continuation of the same situation.

The second element was a three-digit number. This number designated the identity of the initiator of the action. (Each child and teacher participating in the study was assigned a three-digit identification number).

The third element was also coded as a three-digit number. This number identified the recipient of the action.

The fourth element was a two digit number. It identified the action that had taken place. (See Table 3 for the identification number of each behavior category).

The fifth element, a two digit number, designated the action as an "approach" "in contact", or "avoidance" behavior.

The sixth element was coded as a two-digit number. It described the affect of the actor as positive, negative, or neutral.

Reliability of the Interaction Data

Both observer and coder reliability was established between two judges. In both sets of reliabilities, the Pearson correlation was used to assess reliability. The correlation was calculated in the following manner: a frequency count from both judges was obtained for each child on each variable. The Pearson correlation was then calculated for each variable for each child. Calculations were not possible for behaviors that had zero frequencies for both judges Observer reliability ranged from .864 to 1.000. Coder reliability ranged from .737 to 1.000 (see Tables 8 and 9).

Analysis of time spent in different activities

This analysis was limited to those interactions and activities which lend themselves to a time analysis. For example, activities such as taking initiative and aggressing are of a momentary nature for the most part and are not suitable for a time analysis. Behavior such as dramatic play or playful contact do extend over time and are suitable for a time analysis. The following categories were selected for the time analysis: Goal directed alone, Group goal directed. Organized goal directed, Dramatic play alone, Dramatic play with others. These actions were timed by listening to the recorded observation and timing each from the beginning to the end by use of stopwatches. The detailed procedure was as follows: At first contend analysis was carried out on the basis of the recorded tapes. After the coding was completed single categories selected for time measurement were listened to each separately by replaying the taped focusing on the measurement of time spent in that single activity. This procedure was repeated for each category. Timing was done in each of the five two-minute free play and five two-minute structured observations for each child.

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* The field layout and sample coding sheet are located in Appendix C 1 - C 2.

Cell 1 (homogeneous age - homogeneous social class centers) at the 36 month pre-test level, was composed predominantly of children from Get Set (Head Start) Centers. These children tended to stay in the centers once they had been placed. At New Horizons, on the other hand, the mothers were enrolled in educational programs. Once they had finished their studies or dropped out of the program, they had to withdraw their child from the center.

Variable Selection and Scale Construction

Trust and persistence were selected as a pair of basic socio-emotional variables because of a potentially important relationship between them. The same condition may favor the development of trust in people and of initiative and persistence in exploring and mastering one's physical environment. This condition is the presence of adults in the infant's environment who respond predictably and in a positive manner to the infant's dependent as well as independent needs. Such an adult environment will both foster trust and permit, encourage, and reward the infant's explorations of his environment. It is hypothesized that the effective nurturant adult is perceived by the child as a competent resourceful person who thereby serves as a model for the child's own persistent coping with challengers in his environment. An important condition for this outcome is that the adult will withdraw nurturance when the child is motivated and able to assume greater autonomy. Given such circumstances, it is hypothesized that trust and persistence are interrelated with one another in the child's socio-emotional development. (For more detailed discussion of this process see Beller, 1973).

Trust: Four measures were used in the assessment of trust in our structural situation: looking, postural adjustment, approach-avoidance behaviors, (not in Appendix D-1) and affect. Dimensions extended from low to high positive and from low to high negative reactions on all scales. Three point scales were used for each direction, that is positive and negative dimensions, to measure the child's response. Looking at and affective response were scored of an adult, were added as measures of the child's trust. Scoring was carried out in predetermined time periods in which procedural steps were programmed, (See Tables 19, 20, and 21). The time sampling of the measured behavior was determined by the length of each step which was 20 to 30 seconds for 12 month old children and from 1 to 2 minutes for 24 and 36 month old children.

Persistence. In approaching our task, persistence was defined as goal-directed and task-oriented motivated behavior. Our composite measure of persistence consisted of dimensions such as time spent on task, goal directedness, intensity of motivation, style of persistent behavior, the affect manifested in the situation, and flexibility in instrumental and goal responses.

The persistence tasks always followed the trust situation after a brief interval. (It was not possible to alternate order of sequences of trust and persistence without risking carryover effects of success and failure from the persistence to the trust situation). Each child was given five problem-solving tasks with different levels of difficulty (See Tables 22,23, and 24)Our measure of task orientation was formulated against the background of the work done by Keister (1943), Moore (1931), and Beller (1955). These investigators distinguished between time on task, time on obstacle, and time on distraction. The work of Barker et al. (1943), Lerner (1941), and Keister influenced our choice of measures of withdrawal from task and non-task oriented behaviors.

Barker et al. studied regressive and aggressive forms of behavior. Lerner was concerned with the reality departure, and Keister with the rationalization by children who were exposed to failure and frustration in their work or their play. In our study we distinguished between spontaneous physical and psychological withdrawal from the task and paying attention to external distraction. The latter was of limited usefulness since it was not controlled by the experimenter.

Our own measure of goal directedness leaned more on an external criterion of the child's behavior, i.e., whether the child accepted the goal defined by the experimenter or whether the child defined his own goal for working with the material presented to him.

With regard to intensity of the child's involvement or motivation, the work of Kramer (1941), and Moore (1931) was most relevant to our dimensions which ranged from high to low intensity. Kramer distinguished between the child's uninterrupted interest and breaks in his interest, while Moore measured the amount of the child's effort manifested in the achievement situation. Our own dimension of intensity employed a combination of criteria, i.e., level of intensity and continuity of involvement.

With regard to style of persistence, our distinctions between autonomous, dependent and aggressive behavior were directly continuous with the work of Beller (1955). Our measures of affect followed those defined by Bronson (1972) and were essentially the same as those employed by us in our trust situation.

The time sampling for direct observational scoring of the persistence categories differed considerable from that employed in the trust situation. All categories were scored during 15 second intervals which followed 15 second intervals of observation. The number of 15 second intervals varied from task to task. Time on each task varied from 2 to 7 minutes. At the end of each task the observers rated the child on flexibility. This dimension was measured on a three point scale ranging from inflexible to very flexible.

We set out with the intent of controlling several aspects which are relevant for the measurement of task-oriented behavior and persistence, i.e., task difficulty, type of task and type of distraction. With regard to task difficulty we selected some easy and some difficult tasks. However, we did not quantify or determine objectively the degree of difficulty. With regard to type of task, we distinguished between receptive and manipulative tasks. For each age level there was one receptive task consisting of listening to a story or looking at a book, while all the other tasks were of a manipulative nature.

Description of Sample in Trust and Persistence Study[1]

Sample sizes at pre and post testing are reported in Tables 15, 16,and 17 . 151 children were pre-tested in the Trust and Persistence Study, consisting of 68 males and 87 females. Of these children, 38 were pre-tested at 12 months of age (see Table 15 , 60 at 24 months of age (see Table 16 , and 53 at 36 months of age (see Table 17. The vast majority of the sample was lower-class black children (80%+).[2]

Ninety-three children, 45 males and 48 females, were post-tested. Eighteen of these children were 24 months of age (pre-tested at 12 months; see Table 15 , 36 were 36 months of age (pre-tested at 24 months; see Table 16 , and 39 were 48 months old (pre-tested at 36 months; see Table 17 . Again, the sample was predominantly lower-class and black (80%+).

An examination of Tables 15-17 shows which cells lost the most subjects during the pre-post interval.

Certain factors contributed to the high attrition rates in certain cells . Certain centers, particularly New Horizons and YGS[3] had consistently poor attendance and high rates of turnover. Also two of the centers, Rebound and New Horizons, did not allow children to stay in the center past the age of 3. Several centers had no information on where the children went after leaving the center, which seriously hampered recovery efforts.

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[1] Data were collected for a small sample of middle class children. The data are not included in the analysis of the present report.

[2] The criteria employed by the day care centers for eligibility of acceptance of children determined this designation. Children whose parents either received or were eligible for public assistance.

[3] The population of YGS changed during the year between sampling for Wave 1 and sampling for Wave 2. Thus, their cell placement changed.

Reliability of time measures

For each timing variable, the amount of time spent was summed across all 5 two minute periods in each of the two situations and then summed over the two situations. Reliability of each timed variable was estimated separately.

Two independent judges timed each variable by listening to the taped record of the observations of nine different children. The Pearson product r was computed on the basis of the summed scores of each of the two judges.

A second method of analyzing agreement was to examine the absolute difference between the two judges on the summed measure for each variable. The mean absolute differences for each variable are reported, along with the reliability coefficients in Table 10. For one of the 15 variables, dramatic play alone, neither judge recorded any instances among the nine test protocols. Hence no reliability coefficient could be estimated. For a second variable, dramatic play, one judge reported coefficient estimated for this variable as well. Of the remaining 13 variables the median reliability was .96 (see Table 10).

Teacher Ratings.

The observational study concentrated on two and three year old target children in the four environments of the study. The functioning of caregivers was observed only when they came in contact with the target children. In order to obtain a more concentrated observation and assessment of caregivers a separate observational study of caregivers was carried out which consisted of two half hour observations by each of two independent observers. One half hour observation was carried out during free play and the other during more organized group activities. Based on this both observations the observers rated 6 caregivers in each of the four environments on each of twenty 9 point scales of teacher functioning. Descriptions of each of the scales are included in Appendix F. These scales constitute an extension and modification of 11 original scales that were developed and used in two earlier studies (Beller and Shain, 1974, Beller, 1967). The purpose of these scales has been to assess two major areas of teacher functioning, that is, technique and style of teaching (Beller, 1967). Technique refers to curriculum oriented behavior. Teaching style refers to the more social and emotional interactions of the teacher. Repeated Factor Analyses have supported this distinction. Examples of teaching technique are: approach to learning through giving information or questioning and stimulating discovery, Flexibility of Programing, arrangement of the use of space, emphases on individual or group contact. Examples of teaching style are: Sensitivity, Expression of Affection, Amount of Praising. Control over children, over the use of materials, and correcting children have been found to be overlapping characteristics.

The modifications and extensions of the scales have been made to adapt them to Infant Daycare, to particular interests of the present study, and to add several dimensions of teacher functioning and interpersonal behavior which were not included among the original scales. Examples of scales added for the purpose of a more adequate assessment of Infant full day care are: Use of time in custodial activity, educational activities, or non-relevant behavior such as chatting, drinking coffee, smoking cigarettes, or just sitting and daydreaming - all of which has been designated as being inactive in relation to the infant care, and educational situations. Examples of scales added because of general reasons, that is, new interests of this investigator are Responsiveness, Intrusion, Facilitation, and Amount of Verbal Interaction.

Appendix D summarizes the 20 scales and indicates the direction of scoring. A number of scales were reversed for the purpose of scoring in order to counteract stereotyped response on the part of the rater and there by brighten the uniqueness of individual scales.

Reliabilities of each of the twenty scales based on a sample of 24 teachers stated by two judges are reported in Table 11. With one exception reliabilities ranged from .71 to .94.* Since these scales were used for the first time in their modified and extended form more complete data on ranges absolute and mean differences between judges are included in the Table of reliabilities.

Results of the data analysis will be presented in the following order: First we shall report the findings concerning time spent in different types of activities and interactions by children in different day care centers; secondly, differences between environments in frequencies of adult/child and peer interactions broken down by direction of interaction between the target child with the adults, his peers and his physical environment. The second analysis was carried out in three stages: First, on the 75 detailed observational categories, secondly on groupings that reduced the number of categories to 47, and third on the most collapsed grouping which reduced the number of categories further to 31 categories. The third analysis dealt with differences between environments in teaching style and technique assessed by means of observational ratings; the fourth analysis will deal with differences between the four environments in the assessed change of children's trust and persistence over time; the fifth analysis will deal with changes in intellectual competence as measured by the Bayley Infant Scales and the Stanford Binet Scales in those same children.

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*The low reliability on the teacher scale "Approach to Learning" reflected a communication between the trained observers.

Training of Experimenters and Observers in the Assessment of Trust and Persistence

During the couse of the study, 16 people were trained to serve the dual role of experimenter and observer. Training for the role of unfamiliar person in the Trust Situations and of the experimenter in the Persistence Situations proceded in the following manner. After reading the appropriate manuals for each age level (See Appendix E1-E6), the trainee was exposed to video-tapes and live observation of trained Trust and Persistence testers. Following these observations, an experienced experimenter demonstrated the testing procedures to the trainee. Feedback concerning technique was provided during the rehearsals by and experienced tester. Throughout the study, feedback was provided to all experimenters by observers (who had also been trained as testers) and by the original trainer and the Senior Investigator.

Following training as the unfamiliar person, or experimentor, each person was trained to serve as an observer, i.e., to score the Trust and Persistence situations (See Appendix F1 to F4 for Scoring categories). Manuals, video-tapes, and direct observation were utilized for training. During the training period, an experienced observer, along with the trainee, scored the tapes and observations. As training progressed, video-tapes were used less often and trainees increasingly scored ongoing tests with an experienced scorer. Feedback followed each of these sessions. Throughout the course of the study, field reliabilities, as well as reliability protocols for various video-tapes were collected. The resulting reliability estimates are presented in Tables 25.1 - 25.22.

Testing Arrangements

Testing arrangements at the various day care centers were made with the director, social worker, or head teacher at the individual center. Generally, a person who had been involved in the center's original decision to participate in the study served as the contact person. An appointment for testing was scheduled approximately one week in advance, followed by a telephone call the day of the test to assure that the child was present and that there had been no alteration in plans.

Generally, one of the caregivers from the child's own classroom served as the familiar person during the actual testing. If all caregivers in the classroom were equally familiar with the child, the choice of which one would accompany the child was left to their discretion. There were no instances in which a volunteer or part-time staff member was allowed to serve as the familiar person in the testing situation.

Due to constant staff turnovers in the day care centers, it was impossible to always have the same caregiver present for an individual child's pre and post tests. However, the sex and ethnic identity of the caregivers who sat with the child was kept the same during pre and post testing.

All testing was conducted at the day care centers, in areas that were removed from the other children. Generally, this was a room that was rarely used or was utilized during limited portions of the day. Any toys or possible distracting items were removed from the room before the child entered. The necessary equipment for the tests (e.g., table, chairs, screen) was also brought in before the child entered the room.

All testing was done in the morning, generally between the hours of 9:30 A.M. and 11:30 A.M. Testing was planned so that it would not interfere with snack or lunch. We also tried to schedule testing so that the child would not miss any outdoor play, as exclusion from such activity tended to upset the children considerably.

Along with the obvious reasons for postponement (e.g., absence of the child), testing was postponed under the following conditions: lack of availability of room, illness of the child (although the child was present), reluctance on the child's part for more than 10 minutes to leave his room for the testing session, and probability that testing would have to be interrupted for some other activity (this only occurred when more than one child was being tested on the same morning and the first child's test took longer than anticipated).

Results

Time measures.

Timing scores on each of the 15 timing variables were analyzed in a series of 2X2 unweighted means a Analyses of variance. Independent variables for the analyses were Age Grouping (Homogeneous, Heterogeneous) X Social Class Grouping (Homogeneous, Heterogeneous). A summary of the outcomes for each of the 15 variables is given in Table 26. For each analysis in which an effect was significance, a separate table, giving means in the four cells, the ANOV summary table, and a summary of any appropriate post hoc tests is presented.

As can be seen from the Summary Table 26 the largest number of significant findings were due to differences between homogeneous and heterogeneous social class groups. The results of the analyses of specific measures are reported in Table 26-34 *. As can be seen in Table 26, children in homogeneous age and homogeneous social class grouping spent the largest amount of time in "goal directed alone" activity. As can be seen from inspection of Table 27, social class differences emerged as a significant main effect for "dramatic play alone". In contrast to mere "goal directed activity alone," "dramatic play alone" appeared more frequently in heterogeneous than homogeneous class groups. Heterogeneous grouping also favored larger incidence of "dramatic play with others", as can be seen in Table 29. However, as distinct from "dramatic play alone," heterogeneity of age grouping favored a larger incidence of "dramatic play with others". "Cooperative play" appeared significantly more often in heterogeneous groups than homogeneous social class groups (see Table 30). In contrast to cooperative play, parallel play appears more often in homogeneous than heterogeneous age groups. (See Table 31).

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*Analyses of variables that did not yield differences approaching significance (p .10) are reported in the Appendix.

"Intentional physical contact" yielded a significant interaction between age and social class mix. As can be seen in Table 32 this interactive behavior appeared most frequently in the groups which had both heterogeneous age and heterogeneous social class compositions. "Time alone" appeared significnatly more often in homogeneous age and in homogeneous social class gorups (see Table 33). In contrast, "time with others" appeared significantly more often in heterogeneous age and heterogeneous social class groups (see Table 34). "Involved looking" or staring occurred significantly more often in homogeneous than un heterogenous social class groupings (see TAble 35). "Non-involved" or aimless functioning yielded results which were similar to those of staring. This behavior appeared significantly more often in homogenious than in heterogeneous social class groups.

In summary children in homogeneous age groups spend more time alone (engage more often in solitary goal directed activities and parallel play, and are no-involved); while children in heterogeneous age groups spend more time with others and engage more often in dramatic play with peers. Children in homogeneous (lower) social class groups spend more time being alone, staring and aimless functioning, while (lower class) children in heterogeneous social class groups spend more time interacting with others, engaging in dramatic play when alone and in cooperative play when interacting with others.

Interactive Behavior in Free Play and Organized Work Situations

I. This section will deal with the outcome of the analysis of our most general groupings of interactions. Inspection of Tables 36 to 44 make it immediately apparent that both type as well as number of situations were important factors influencing the outcome of the analysis. The latter, namely, number of situations, was probably important in this particular analysis because the samples of observations in each of the two separate situations within the four environments were rather small and therefore the analysis gained in power by pooling observations over the two different types of situations.

When we compare the two different situations and the total pooled observations for interations initieated by the target child toward the adult we find that each situation has its own pattern. In the free play situation social class heterogeneity was a decisive factor associated with assertive behavior in children. Lower class children in heterogeneous social class groups manifested significantly more assertive behavior towards adults than lower class children in homogeneous lower social class groups (see Table 36). Social class heterogeneity was also the decisive factor assoc iated with interactive behavior of the target child towards the adult in structured situations. However, in this situation more passive dependent behavior like staring and imitating the adults occurred significantly more o6ten in homogeneous lower class groups of children (see Table 37).. When the observations were pooled over the two types of situations age mix emerged as the most important determinant of the child's interactive behavior directed towards adults. Children in heterogeneous age groups manifested the highest frequency of positive directive influence and modeling when compared with children from homogeneous age groups (see TAble 38). Effects of type of situation on environmental differences was less significant for interactions initiated by adults toward the target child, that is, when the target child was the recepient. However, some interesting results emerged in this area of our analysis. In the free play situation social class mix seems to affect adult initiation towards child. Caregivers in heterogeneous social class groups manifested more nondirective influence such as facilitation and suggestion toward children than teachers in homogeneous lower class groups in the free play situation. Thus, a certain relationship between adults and children emerges. The same environment, i.e., mixed social class, generates less controlling behavior of adults toward children and generates more assertive behavior of children towards their caregivers. In the structured situation, that is, in organized work, age mix seems to have been a more important factor influencing the initiations of adults towards children. As can be seem from Table 37, nurturance occurred more often in heterogeneous age groups while intentional physical contact by adult of child occurred more often in homogeneous age groups. The latter finding emerges again when the observations were pooled over the two different situations (see Table 38).

A third finding reported in Table 38, although it fails to reach statistical significance, points to an interesting reciprocal adult child relationship. In the more structured work situation caregivers in the homogeneous (lower) social class troups were more nonresponsive to initiations from children who as mentioned earlier manifested more passive dependent behavior such as involved looking at their caregivers. Thus, two mutually supportive reciprocal processes may be at work in these interactions. Caregivers fail to repond to (active) demands of their children, who (as result of their being discouraged?) merely stare at the caregivers - seemingly withdraw in fantasy - when they need something. Such passive indirect expressions of needs are difficult to notice and less likely to be responded to especially by caregivers who respond less to any demands of their children when compared to caregivers in mixed social class groups.

With regard to interactions initiated by the target child with peers, we find that type of situation, that is, free play versus structure, did not affect differences between environment. Only when observations were pooled over the two situations did we find significant difference in peer interaction initiated by the target child. As can be seen from Table 37 affiliative behavior with peers was initiated significantly more often by lower class children in homogeneous groups in which the peers also came from lower class backgrounds.

When we turn to interactions initiated by peers towards target child, that is, when the observed target child was the recipient of initiated interactions from other children, we find some indication of a non-symmetrical, cumulative effect of age and social class mix. Children in groups which had both an age and social class mix received less positive affiliation from peers in the organized work situation (see Table 37). This finding which is significant makes sense if affiliative approaches from peers during organized work are taken to represent distraction and difficulty in concentrating on work.

No significant finding emerged in this level of the analysis in the child's interaction with the physical environment.

We may summarize this section of the analysis as follows. Adult child interactions were most consistantly influenced by social class mix in the separate free play and in the more structured organized work situations. In the free play situations children in the heterogeneous social class groups were more assertive to their caregivers who tended to use more non-directive influence such as facilitation and suggestion when compared with caregivers in homogeneous (lower) social class groups. In the more structured work situation children in the homogeneous (lower) social class gorups manifested more passive dependent behavior such as staring and imitating toward their caregivers who in turn, tended to be more nonresponsive to the demands of their children. Age mix also affected adult behavior in the organized work situation in that caregivers in the heterogeneous age groups manifested more nurturance towards their children while caregivers in the homogeneous age groups manifested more neutral physical contact with their children. No consistant pattern of child behaviors was found to be associated with these adult behaviors in our observations.

Very few peer behaviors were found to be associated with group composition on this level of our analysis. The most consistant pattern was that of more positive affiliative peer interaction in homogeneous than in heterogeneous social class groups.

II. When we turn to the analysis of the finer breakdown of 47 groupings of interactions in which approaching and maintaining were kept separate we find that differences in the pattern of interaction changes in places and illuminates somewhat the findings based on the most general groupings of interactions, so we find that in the mixed social class groups "target child to adult" behaviors in the low structure freeplay situations are characterized not only, as earlier, by more frequent positive assertive behaviors but also by positive affiliative initiation of lower class children toward their caregivers (see Table 39) . In the more structured situations of organized work the pattern remains as earlier, one of more frequent passive dependent behavior such as staring at and imitation of adult in homogeneous (lower) social class groups. When the observations were pooled over situations, earlier significant findings disappeared and no new trends or significant patterns emerged. The analysis of the adult to target interactions remained unchanged in the free play situations, (see Table 39 .) lost a little power in the organized work situation (see Table 40) and gained somewhat in power in the pooled situation analysis (Table 41). In ~~the~~ last case an earlier reported insignificant environmental difference now became more significant. Caregivers in the homogenous age - heterogenous social class groups complied least often and those in the hetero-hetero groups most often with their children. (see Table 41. Moreover, caregivers in the homogenous (lower) social class heterogenous age group not only continued to manifest least physical contact with their children but also excercised least directive influence over their children. These added findings from the use of a more refined breakdown of categories help us to interprete a pattern of peer interaction discussed below.

When we turn to the analysis of peer-interactions we find that in specific situations the more detailed breakdown of interactions produced more significant patterns or trends and clarified earlier findings based on the general groupings of categories. For example, we find that in the less structured free play situation which yielded a nonsignificant peer pattern in the earlier analysis, yielded the same pattern significantly in this analysis, i.e. children in homogenous age groups who are from heterogenous social class backgrounds exhibit the most "negative directive" behaviors toward peers (see Tables 36 and 39).However, since we also find now a high incidence of affiliation (positive approach) for "peer to target" in the same group and same situation we are inclined to conclude that in the free play situation both positive and negative peer interaction are highest in this group composition (see Table 39) .In the more structured work situation we also find both more significant trends and clarification of earlier trends in peer interactions. Thus, with regard to "target to peer" behavior which yielded no significant pattern when based on the most general grouping of categories. Affiliation (positive approach) emerged most often after the finer break down in the homogenous age-heterogenous social class groups (see Tables 37 and 40) . With regard to "peer to target" behavior the finer breakdown supported and strengthened the earlier finding of least "affiliation" in the hetero-hetero group and most "Affiliation" in the homo age and hetero social class group during organized work since the finding applied both to approach and maintaining behavior after each was anal zed separately (see Table 37 , and 40). When observations were pooled over situations the finer breakdown of categories produced several new inter-related findings. Playful physical contact among peers (i.e. Affiliation - mixed maintaiming) was manifested significantly most often by children in the heterogenous age-homogeneous (lower) social class groups. (see Table 41). This type of contact or affiliative interaction as defined in our study series both as an expression of affection and as an outlet of tension-aggression. Inspection of the "adult to target" findings reported in the same Table as mentioned above, reveals significant trends and both occur in the same group in which Affiliative mixed peer interaction was found most often. Caregivers in this group exhibited significantly less physical contact with their children and excercised less Directive Influence than caregivers in any other group. Thus, groups in which adults used a detached laissez faire leadership, that is, adults who were least affectionate and least engaged in guiding their children were most productive of horse play among peers.

Another significant finding reported in Table 41 was that higher frequencies of both positive and negative peer interactions found earlier in the free play situation among children in the homogeneous age-heterogeneous social class group, emerged again in the analysis based on pooled situations.

However in this new analysis we also found that caregivers in this group complied least often with requests from children.

In summary, the more refined breakdown of categories resulting from seperation of the approach and maintaining phases in observation of the analysis of interactions yielded more significant and more meaningful patterns of peer interaction associated with type of situation and with age and social class grouping. In the free play situation our hetero-hetero groups shared low status on frequency of negative peer interactions and higher status on frequency of positive peer interactions. However, in the organized work situation this group ended up always on the low frequency side of significant peer interaction differences. These new findings strengthened our earlier interpretation of lower peer affiliation as less distraction in this group during organized work. Conversly, peer interaction seemed to be associated with more conflict and distractability in the homogeneous age-heterogeneous social class groups in which it was both most negative and most positive during free play and more frequent though positive than in any other group during organized work. A large difference in caregiver behavior which might be related to peer interaction differences of the same two groups is the lowest frequency of adult compliance with child requests in the homo age-hetero social class group and the highest frequence of the same caregiver behavior in the hetero-hetero group. In the former group peer interactions seemed to be more conflicted in free play and more disruptive in organized work than in the latter group.

III. As we move to the analysis based on the most detailed breakdown of our observational categories, that is, without grouping we find only support of trends that emerged from the earlier analysis based on grouping of categories. In the free play situation children in heterogenous social class groups accepted more actively initiations from caregivers who in the same groups offered more help (and suggestions) to their children. (see Table 42). In the organized work situation we find that children in the homogeneous social class - heterogeneous age group stare more at their caregivers who tend to be more detached physically from their children in the same situation (see Table 43). In the pooled situation analysis we find as earlier that children in the heterogeneous groups initiate more positive interactions with their caregivers than children in the homogeneous groups (see Table 43). In the same analysis we also find that caregivers from groups in which children manifested most conflicted peer interactions (in earlier analysis) comply least with the requests and demands of their children while caregivers from groups whose children had the least disruptive or disorganized peer interactions (in previous analysis) comply most often with the request of their children (see Table 43) as in previous analyses caregivers who are least physically affectionate towards their children are found in groups whose children were found to engage most often in "horseplay" with each other. (see Table 43).

With regard to peer interaction we had as in previous analyses that in the free play situation children from homogeneous age- heterogeneous social class groups manifest most negative reaction to one another (see Table 42) while in the organized work situation children in the hetero -hetero group engage least often in (distracting) social participation (see Table 43) In the pooled situation analysis we find as earlier that cooperative peer interactions such as "showing" and imitating are consistantly highter in the hetero-hetero groups and consistantly lower in the homo-homo groups, while playful contact (i.e. horseplay) occurs consistantly more often in the homogeneous (lower) social class heterogeneous age groups (see Table 44).

In summary the analyses based on single categories showed which categories were strong enough to differentiate environments without being part of larger clusters. Although entirely consistant with the outcomes of the more grouped category analyses the findings from the last analysis added less new findings and insights than the step from the first to the second level grouping of categories in which approaching and maintaining phases in the interaction sequence were separated. However, the last step was important for future use of our categories since it demonstrates the differentiating power of single categories regardless of any conceptual system on might use for grouping interactional behaviors.

Teaching techniques and teaching style.

The data on teacher functioning were analyzed by means of analysis of variance. The outcomes of this analysis are presented in Tables 45 to 60. It can be seen from Table 45 that by far the most significant differences in teacher functioning were found between teachers in homogeneous and heterogeneous social class groups of children. Several significant differences emerged between teachers in homogeneous and heterogeneous age groups. In three instances significant interactions were found between differences in social class mix and age grouping. We shall now turn to a discussion of these findings and refer to the adjoining tables which report the outcome of the statistical analysis.

The following differences were found in teaching techniques of caregivers in homogeneous and heterogeneous social class groups. Caregivers in heterogeneous or mixed social class groups interacted more verbally with the children, spent more time in educational activities, and were more individual rather than group-oriented and used a discovery approach to learning more often than caregivers in homogeneous (lower) social class groups. The latter spent more time in custodial care, exercised more control over their children, but controlled the choice of materials on the part of children less than caregivers in heterogeneous social class centers. Two of these findings need to be qualified because of interactions. As can be seen from Table 49 differences between caregivers in the amount of time spent on custodial care in homogeneous and heterogeneous social class groups were larger and more significant in those instances in which the age composition in the group was homogeneous. That is, caregivers in homogeneous age heterogeneous social class groups spent the least amount of time in custodial care. Social class mix differences were negligible between caregivers of groups which had heterogeneous age composition of children. The same pattern of interaction applies to differences in amount of control on the part of caregivers over the children. As can be seen from Table 50, the difference on this teaching dimension was large and significant between caregivers of homogeneous age groups where caregivers in the heterogeneous social class group exercised very little control over the activities of their children. Social class differences on this dimension of control were small and negligible between caregivers of heterogeneous age groups.

When we turn to teaching style we find that caregivers in heterogeneous social class groups were more sensitive, more responsive, gave more praise and expressed more frequently affection towards the children than caregivers in homogeneous lower class groups. Caregivers in homogeneous groups expressed more criticism and were more intrusive and less facilitative than caregivers of heterogeneous social class groups.

Significant differences were found on three teaching technique variables between homogeneous and heterogeneous age groups. Caregivers in heterogeneous age groups spent less time in custodial activities, loafing, and made less frequent distinctions between work and play. With regard to teaching style, caregivers in mixed age groups were more facilitative while caregivers in homogeneous age groups were more intrusive.

Data Analysis

Trust

Scoring: Three scales, (1) affect, (2) cooperative behavior, and (3) body tension, were scored individually in the trust situation. Behavior and body tension were rated on a seven point continuum with (1) indicating least uncooperative behavior and least body tension. Affect was a two part scale, positive affect (ranging from 0 to +3) and negative affect (ranging from 0 to -3). Both ends of the affect scale were scored separately for each time segment in the trust situation.

The number corresponding to the rating on each of these scales (cooperative behavior, body tension, positive affect, and negative affect) for each item was assigned a column on a data card with its place in the time series preserved. These data were used to derive the measures as employed in the actual analysis.

Derived variables: At both the 24 and 36 months age levels the :"raw" data were consolidated into a series of derived variables. These variables reflected mean scores on each scale oever the entire trust situation and consisted of overall positive affect, overall negative affect, overall affect, overall cooperative behavior, and overall body tension. Similar measures based upon specific time segments of the Trust situation were also derived. For example, measures of positive affect, negative affect, cooperative behavior, and body tension during the board walking situation were included. A total of 25 time sequence measures were derived for 24 months trust, and 24 were derived for 36 month trust.

Since the trust situation was not identical at the 24 and 36 months age levels, their respective derived measures, with the exception of the "overall" scpres, were not identical. Therefore, in order to perform the pre-post comparisons, it became necessary to consolidate further the original set of derived measures. For the 24-36 month age pre-post comparisons the following secondary derived measures were employed: overall positive, overall negative, and overall combined affect; overall cooperative behavior; overall body tension.

All measures were derived employing SPSS programs. Within these programs, missing data were assigned the value "9" so that they were easily identifiable.

Scoring: Scoring persistence was more complex than scoring trust. Each fifteen second interval of each of the five tasks was scored on the following measures: time on task (continuing task, interuptions); goal directedness (E-goal or C-goal); intensity (of involvement); style (emotional dependency, instrumental detpendency, self-stimulation); and affect. Only intensity of involvement and affect were rated on continuum scales. The intensity scale ranged from (1) (low intensity of involvement with object) to (3) (high intensity of involvement with object). The affect scale ranged from (1) (extremely negative affect, crying) to (7) (extremely positive affect, beaming smiles). All other behaviors were simply checked when they occured. Goal directedness and intensity were scored only when the child was continuing on task.

The two scales of affect and intensity were scared for each observational 15 minute time interval of each task. Frequency counts for each of the five tasks were scored for the various style measures, e.g., number of instances checked during all 15 minute time intervals for emotional dependency during each task. Time on task measures and goal directedness were scored (1) for involvement 50% of the time or less and (2) for continuous involvement. Total number of E-goal and C-goal intervals per task were also recorded. As in the trust situation, these scores were used to derive the measures employed in data analysis.

Derived measures: Since the persistence situation was the same at the 24 and 36 months age levels the derived measures were identical. Originally, twenty six measures were derived for each task at each age level. Preliminary analyses indicated little or no variance for several of these measures. Therefore. several measures were dropped (i.e. familiarity, aggression, self-stimulation, attends external distraction, completes task). Several measures with low variance were combined: emotional dependency on caregiver and on E, instrumental dependency on caregiver and on E, glances at caregiver and at E, physical and psychological interruption. The final set of derived measures used in the analysis of persistence were: continues task, time on E goal, time on C goal, a ratio of E-goal time to C-goal time (ETCT), affect, intensity of involvement while continuing, emotional dependency, instrumental dependency, glances, interruptions, and flexibility.

Data analysis:

The usual procedure for analyzing pre-post change, namely, analysis of covariance, was not used because of unequal N in our cells. Instead we used a procedure of first determining residual change from a regression analysis and then using this residual change in an analysis of variance. Residual change was determined as follows:

1. Each subject's actual change score was calculated by subtracting his pre-score from his post-score.

2. A regression equation was generated in a univariate regression analysis which predicted the subject's change score from his pretest score, i.e.:

$y = bx + a$

where: y = predicted change

b = regression coefficient

x = pretest score

a = regression constant

A subject's residual change score was then determined by subtracting the subject's predicted change score from her/his actual change score. If the actual pre-post change exceeded the predicted change score, the residual change score was positive. If the actual change score was smaller than the predicted change score, the residual change score was negative. If they were equal, the residual change score was zero.

These residual change scores were employed in an analysis of variance.

Results

I. Trust

As was discussed in the procedures section differences in the pre and post Trust situations for 24 and 36 month old children required that a limited number of secondary derived variables be employed in the actual data analysis. The combination of data left us with five major trust variables: overall positive, negative and combined affect, cooperating with the unfamiliar person (i.e., accepting approaches, invitations, requests) and overall body tension. Small sample size required that we collapse over sex. The outcome of the Trust analyses is contained in Tables 68 - 72.

Day care experience in mixed age groups resulted in much higher increases in positive affect in response to unfamiliar adults in two to three year old lower class children (see Table 68).

Overall negative affect decreased in lower class children from two to three years of age after spending a year in mixed social class day care centers (see Table 69) By comparison, a change in the opposite direction occurred in lower class children after spending a year in day care centers serving only lower class children.

The analysis of combined affect took into account changes in direction when values of negative and positive affect were placed on one dimension. The outcome of the analysis of changes on this combined dimension is presented in Table 70. It can be seen that children having this day care experience in mixed age groups showed the greatest positive change in affect in response to novel experiences. Children attending homogeneous age day care groups changed, if at all, in the opposite direction.

The next analysis dealt with changes in body tension (see Table 71). Although an empirical difference emerged it was not significant.

The outcome of the analysis of changes in cooperative behavior is presented in Table 72. It can be seen that lower class children who experienced day care in mixed groups together with children from middle class families became more cooperative in these situations at age three than they were a year earlier. This change was largest in children who experienced day care in groups that were heterogeneous both with regard to social class and age. In contrast, lower class two year olds enrolled in homogeneous social class day care centers, that is, serving only lower class children, became less cooperative over a years time in situations designed to elicit trust behavior.

In summary, day care experiences in the context of heterogeneous age and social class grouping enhances the development of trust in two year old lower class children. By comparison, homogeneous age and social class grouping has an adverse effect on the development of trust in two year old children over the period of one year. The age composition of groups seems to have the more salient effect on the affective component of trust whereas the social class composition of groups appears to affect most clearly changes in cooperative behavior in children facing novel experiences under optimal conditions,that is, in familiar situations and in the presence of familiar adults.

II. Persistence

The outcome of the persistence analysis is contained in Tables 107-159. In order to summarize the voluminous data we shall confine ourselves to the "Variables" and "Tasks" which yielded the clearest patterns of differences. Variables 1 and 7 ("continues task" and "physical and psychological withdrawl"), variables 8 and 10 ("instrumental dependency" and "glancing at caregiver or experimenter") and Task 5 ("the insoluble candy jar task") yielded the clearest (main effect) differences between social class groupings or between age groupings.

Social Class Groupings:

On a number of variables differences of change in response to Task 5 were in the opposite direction to differences of change in response to the four other tasks. On the last task (5), the child learned on his first exposure to this task that he would not solve it and that the experimenter (always) terminated the failure experience by intervening and solving the task. A second unique characteristic of this task was that the solution of the task was associated with a candy rewarded, an event that assumes particular importance for very young children and for children coming from economically deprived families. The first four tasks although varying in difficulty were all solvable, success or failure was never associated with intervention by the experimenter and reward was never extrinsic to the task, that is, it never consisted of social or material rewards for solving the task. The differences just described emerged most clearly with regard to two persistence measures: continuing task (Variable 1) and Physical or Psychological Withdrawl (Variable 7). Children from mixed social class groupings persisted less, i.e., discontinued sooner and withdrew more often from this task on post-testing (see Tables 149 & 155). In contrast, children from homogeneous lower class grouping tried longer and withdrew less on post than pre-testing on this insoluble task for which success was crowned with external and extrinsic reward. An interesting supplementary finding can be seen in the outcome of the analysis of changes in affect (Variable 5) on Task 5. Children from the homogeneous lower class groups exhibited more negative affect while they persisted longer in the insoluble task during post-testing than during pre-testing. The opposite was true of (lower class) children from heterogeneous social class environments who manifested more positive affect during post than pre-testing when they persisted **less** on the insoluble task (see Table 153). Thus, the changed persistence of the children from the homogeneous lower class groups seems to be non-adjusted perseveration with frustrated affect oriented towards an external extrinsic reward. This attributed meaning or interpretation becomes even more convincing by the outcome on the other four tasks (see Tables 107- 148) on which the differences in pre-post changes between heterogeneous and homogeneous social class groupings run in the opposite direction to comparable changes on Task 5. Children from heterogeneous social class persist more on these Tasks during post testing since they continue longer and withdraw less often than during pre-testing, especially when magnitude and direction of these pre-post changes are compared with that of children from homogeneous (lower) social class groups. Two further related changes were found with regard to the child's appropriate use of materials as demonstrated by the experimenter or in idiosyncratic ways (Variables 3 and 4) on the Keys of Learning Task (Task 1). As can be seen in Tables and (Variables 3 and 4), children from mixed social class groups changed towards less idiosyncratic and more appropriate relative to the use of the Keys of Learning task materials from pre to post-testing. The opposite change was observed in lower class two to three year old children attending homogeneous sccial class day care centers.

Thus, day care experiences in the context of mixed social class groupings contributes to increased persistence in two to three year old lower class children on tasks with intrinsic reward for staying with the task or for manipulating more appropriately task related materials. Opposite changes may be attributed to day care experiences of lower class two to three year olds in the context of homogeneous lower class groups. Over time, these children manifest less motivated and more immature manipulation of materials related to task intrinsic rewards.

Age Grouping:

Two patterns of differences in change over time appeared between age groupings. The first occurred in instrumental dependency, the second in involvement and flexibility. Both differences in change occurred on the insoluble and the most difficult soluble tasks.

Children attending age mixed groups sought more help directly and explicitly from the two adults present on post than pre-testing of the insoluble and the most difficult tasks (Tasks 2 and 5). The same children manifested an opposite trend during the same two tasks with regard to the frequency of just looking or glancing at the adults (see Tables 126 & 158). In contrast, two to three year old lower class children attending homogeneous age centers became less direct in their seeking of help during the insoluble and most difficult* tasks from pre to post-testing. These opposite trends among children from homogeneous and heterogeneous age groupings were statistically significant for instrumental dependency on Tasks 2 (see Table 124) and for "just looking" on Task 5 (see Table 158). The second finding, although statistically less significant, is empirically clear and fits very well into the overall meaning context. Children from heterogeneous age groups showed a decrease in involvement (Variable 6) and simultaneously an increase in flexibility (Variable 11) during the post-testing of the insoluble task (Task 5) (see Tables 154 &159). Precisely the opposite change occurred in children from homogeneous age groups. When faced again a year later with the same insoluble candy task, these children got more involved and became less flexible than they were a year earlier at the age of two.

We may summarize this section of findings as follows. Lower class two year old children benefit from both heterogeneous social class and age grouping in day care. After a years day care experience in mixed lower and middle class groups, these children show greater persistence in task oriented behavior and more appropriate use of materials when the tasks are soluable and the rewards of their efforts are task intrinsic. However, when confronted with an insoluble task they perseverate less and withdraw earlier on repeated exposure to such a task a year later. Changes in opposite directions occur in lower class two year old children after they spend a year in homogeneous lower class groups of children.

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* It should be pointed out that stacking cups and saucers as demonstrated by the experimenters was an almost insoluble task for many of the children.

After a year's experience in mixed age groups, these lower class two year olds expressed their need for realistic help more directly when faced again with a difficult and/or an insoluble task. Moreover, in the case of the insoluble task, they got less intensively involved and used more flexible approaches to the solution of the task. Lower class two year olds attending day care centers with homogeneous age groups changed in the opposite direction. They became less direct in seeking help from their adult environment when confronted with an overly difficult task but instead tried harder and perseveratec more in failure producing behavior.

ADDENDUM TO RESULTS SECTION:

At both pre- and post-testing, IQ data was also gathered. During the pre-testing, developmental differences required that some of the two year olds be given the Bayley Scales of Infant Development while others were given the Stanford-Binet. All children were post-tested at age three on the Stanford-Binet. As Table 172 indicates, children from homogeneous age grouping day care centers declined in IQ scores, while those from heterogeneous age grouping day care centers showed increases. The difference is statistically significant. This finding meshes well with the research and perspective cited in the Introduction to this report. (pp. 1-3)

Discussion

At the outset of the discussion of the findings, it is important to restate certain points which must influence any interpretation of the findings from the present study. Our controlled situations were structured to elicit behavior relevant to trust rather than to stranger anxiety, meaning that we examined a child's readiness to accept gradual approaches of an unfamiliar person who offers novel experiences, some of which involved risks. The child was offered help and protection when taking such risks. Finally, the whole experience took place in the presence of a familiar caregiving adult and in familiar surroundings. We do not claim that trust bears no relationship to stranger anxiety. We only make it clear that our situation was designed to be optimal for the child to feel secure enough to accept offers for exploring new experiences.

A second characteristic of our study that is crucial for the interpretation of our findings is that we carried out carful observations in the four group compositions whose effects on the socioemotional development of two year olds we wanted to investigate. In other words, we wanted to generate rather than speculate about the empirical data that were to serve as a basis for interpreting different changes in trust and persistence in the four day care groupings of social class and age mix. Unfortunately, the attrition in our Trust and Persistence study was too great to confine ourselves to subjects from that study. Therefore, our observational study only included subjects from the trust and persistence study. A second point to be reiterated is that the observational study limited itself to the two age levels for which we obtained an intact balanced design for comparing pre-post change in the four environmental conditions of age and social class mix, namely, two and three year old children. Thus, we shall employ actually observed characteristics of the four environments in which our children spent the year over which we measured changes in their socioemotional and intellectual behaviors.

A third point of importance for our discussion is that we adhere to a reciprocal rather than a unidirectional causal model of socialization. It was our purpose to investigate effects of age and social class groupings in infant day care on the socioemotional and intellectual development among lower class children. We view this objective as a complex one which addresses several interactions. One interaction is the relationship between group composition and peer, as well as adult-child, interaction. Different age and social class groupings will elicit different interactions among children and different interactions among adults and children. This view towards the data will be clear to the reader at this point from our limited discussion of findings in the observational study earlier in this report. The characteristic patterns of child-child and adult-child interactions observed and discussed in our observational study provide the empirical basis for interpreting differential changes in trust and persistence in the children from the four different environments.

A fourth point to be emphasized at the ourset of our study is that great care was taken in our study to avoid confounding bias. Each condition of grouping and age of subjects was represented by two or more groups. Male and female observers, black and white male and female experimenters were balanced in their assignment ot the four different environments, to boys and girls and to pre and post testing.to avoid any bias in the data collection. No child was tested or observed by the same adult in pre or post testing. So, while our samples are small, the data generated were collected with great care to maximize their value for gneralization. This concern applies also to the fifth and final point, namely, our attempt to limit our analysis and interpretation to as few factors and variables as was possible without sacrificing meaning, and to avoid discussing, as much as possible, second order interactions in analysis of variance outcomes. For example, we avoided analyzing complex relationships between age, sex, socioemotional and cognitive variables, because our samples of groupings and subjects for the trust and persistence study were too small to permit sound empirical generalizations for more than a few factors and variables.

Now, to the findings of the observational study of social interactions in the four environments. Both age and social class heterogeneity had similar effects on sociability in two and three year old lower class children. Heterogeneity stimulated more frequent peer interaction and developmentally higher levels of interaction in the form of dramatic play and the exploration of adult roles in fantasy play. Their early manifestation of internalization of social roles and social functions is particularly important in lower class children from minority groups, because of problems of impulse control, control of aggression and lower self-esteem of school age children from these minority groups who have not had the benefit of preschool intervention (Beller, 1974; Zigler, 1976). This conclusion is further supported by the effects of homogeneous social class grouping which produced more solitary and passive behavior as well as more aimless wandering in children from the same backgrounds. Such early effects are fertile ground for poor emotional control and low self-esteem later on, as well as for the development of low social competence. It seems that the contact with different children, be they older, younger or from more stimulating backgrounds, produces more constructive and assertive social coping in two and three year old children from economically and socially deprived families.

Age and social class grouping had positive effects as well on the caregivers or infant educators. However, the effects were different for age and social class mix. Mixed age grouping seems to produce greater nurturance, supportiveness and sensitivity to individual needs of children. The presence of younger and older, weaker and stronger, more helpless and more self sufficient children facilitates nurturance in the caregivers as well as a sensitivity for individually different needs of children who function clearly on different developmental levels. The hurt pride of a three or four year old, the obvious disadvantage resulting from heightened social demands the older child experiences vis a vis several infants in the same group sensitizes the caregiver to the unique needs of individual children.

Social class heterogeneity had different effects on cargivers, although these effects were not incompatible with those just described. The presence of children from educationally and economically advantaged and disadvantaged families in the same group seems to make the caregiver not only more helpful byt also more respectful of lower class children and more compliant with their demands. She guides them more by facilitating their self chosen goal directed behavior than by directing them intrusively. This greater respect for the autonomy of the disadvantaged child may be encouraged by the experience with children from advantaged families who are more competent and require less direction. Interestingly, the lower class children in these mixed groups are more respectful of the cargiver's autonomy when they assert their needs which they do more often than lower class children in homogeneous social class groups. They also accept suggestions from their caregivers more readily than lower class children in homogeneous groups. Thsu, the presence of middle class children has a pervasive, reciprocal effect on mutual respect between caregivers and lower class children.

Turning to the pre-post changes in trust among lower class two year olds over a year's time, we find that age heterogeneity of grouping was associated with a change towards more positive affect when faced with novel experiences in the familiar setting of the day care center and in the presence of the child's caregiver. Social class heterogeneity was associated with a decrease in negative affect and greater cooperation with the adults offering novel experiences and offering help when risk-tak ing was initiated by them. Changes in the opposite direction were associated with age and social class homogeneous grouping. It is not difficult to understand these effects of grouping against the background of the data from the observational study. The child in heterogeneous age groups experienced greater nurturance and attention to his individual needs. He also experienced older children and with them developmentally advanced behavior that, no doubt, was novel to him. These experiences led the two year old lower class child to develop greater trust in this environment so that he engaged with more positive emotions in novel social experiences offered by our trust situations.

Children from heterogeneous social class groups had similar group experiences as those described for heterogeneous age groups. But, they had other relevant positive experiences as well. They also experienced more cooperation from their caregivers with the demands they made on them and, in turn, exhibited greater cooperation with suggestions and help offered them by their caregivers. It is a small step to register less negative emotions and increased cooperation in these lower class three year olds to the introduction of another novel experience that our trust situations introduced in their familiar trusted environment. Apparently, the day care experience was less secure for lower class children in homogeneous age and social class groups because, generally, they either failed to exhibit such changes or changed in opposite directions with regard to their emotional reactions and cooperation when faced with novel social experiences in their familiar day care surroundings and in the presence of their familiar caregivers. Again, these findings provide an important developmental link with older children from deprived black families whom the present investigator found to be mistrustful towards their teachers in nursery, kindergarten and first grade. Particularly those children who did not have the experience of well supervised pre-school failed to turn to their teachers for help or manifested inhibition and conflict when they expressed and received support in the form of help and affection (Beller, 1974). Our three year old lower class children in homgeneous social class groups showed the developmental precursors of such later behavior when they were less assertive in the expression of their needs and less accepting of suggestions and offers of instrumental help from their caregivers than children in heterogeneous social class groups.

When we turn to the persistence data we find again that heterogeneous grouping had more favorable effects than homogeneous grouping and that the data from our observational study provide the empirical basis for our interpretations. Children from mixed age groups increased direct requests for help during the difficult and insoluble tasks more than children from homogeneous age groups who in turn increased indirect expressions of dependence in the form of "glances" directed at the adults who could help. In our observational study, we found that caregivers in heterogeneous age groupings were more nurturant and sensitive toward the needs of individual children. It is, therefore, easy to understand why children under such conditions developed greater trust in turning to adults for help when faced with very difficult and insurmountable tasks. Conversly, children who experienced a less supportive adult environment in homogeneous age groups were more hesitant and expressed the helplessness more through direct requests for help when confronted by adults with insoluble tasks. Children in heterogeneous social class groups persisted longer and withdrew less often from task oriented manipulation of materials and accepted the suggested appropriate use of materials more readily than children from homogeneous social class groups. Again, this finding is unders[illegible]able in the light of observational data in the two types of grouping. [illegible]ts in mixed social class groups supported and respected the autonomy of individual children more than their counterparts in day care centers serving only lower class infants. Children in heterogeneous social class accepted suggestion of their caregivers more actively, that is, they took responsibility for the suggested activity and treated it as though they had initiated it themselves.

Thus, we find that children with such interactive experience backgrounds accepted suggested uses of materials more readily and persisted longer in autonomous task oriented manipulations of these materials than they themselves did earlier. Children from homogeneous (lower) social calss groups failed to show such interactive experience backgrounds in the observational study and such changes over time in our pre-post persistence study.

Finally, lower class children from heterogeneous social class groups gave up sooner, that is, persisted less long and withdrew more often when confronted with an insoluble task that was characterized by extrinsic rewards to which only the adult had access. In contrast, lower class three year olds from homogeneous lower social class grouping persisted longer and withdrew much less often when faced with the indoluble candy task that offered a material reward which depended entirely on external adult authority. Thus, it appears to us that heterogeneous grouping in infant day care facilitates the development of trust, assertiveness, and autonomous achievement striving in its children.

Table I

Age, Sex and Ethnic Background of 80 Children Attending Day Care Centers Varying in Their Composition of Age and Social Class

			Social Class			
			Homogeneous		Heterogeneous	
			M	F	M	F
Age	Homogeneous	2 yr.	6 (Black) 2 (Spanish)	6 (Black)	4 (Black)	6 (Black)
		3 yr.	4 (Black) 2 (Spanish)	7 (Black) 1 (Spanish)	5 (Black) 1 (White)	5 (Black) 1 (White)
	Heterogeneous	2 yr.	4 (Black)	6 (Black)	2 (Black)	3 (Black)
		3 yr.	6 (Black)	3 (Black)	4 (Black)	2 (Black)

Table 2

Number of Day Care Centers and classrooms observed in the four group compositions.

		Social Class			
		HOMOGENEOUS		HETEROGENEOUS	
		Numbers of		Numbers of	
Age		Centers	Classrooms	Centers	Classrooms
Homogeneous	2 yr	3	3	3	3
	3 yr	3	3	3	3
Heterogeneous	2 yr	1	7	1	5
	3 yr	1	7	1	5

Table 3: Content Categories

1.
2. Actor
3.
4.
5. Recipient
6.
7. Structure - (organized work)
8. Structure - (group goal)
9. Structure - (teacher directed)
10. Free play
11. Approach
12. In contact
13. Avoidance
14. Not applicable
15. Unscored
16. No response
17. Negative affect
18. Positive affect
19. No category for this number*
20. Active acceptance
21. Affection
22. Boasting
23. Competition
24. Completion
25. Compliance
26. Cooperation
27. Demand
28. Destruction
29. Direction
30. Dramatic play (alone)
31. Dramatic play (with others)
32. Egocentric speech
33. Embarrassment
34. Facilitation
35. Failure
36. Function pleasure
37. Giving up
38. Glancing
39. Goal directed alone
40. Group goal directed
41. Helping
42. Hoarding
43. Imitation
44. Interference
45. Intentional physical contact
46. Involved - non-involved
47. Involved looking
48. Inviting
49. Manipulation
50. Modeling
51. Moving away
52. Moving towards
53. Social withdrawal from a positive approach
54. Negative seeking attention
55. Crying
56. Non-involved
57. Organized activity
58. Parallel play
59. Partial compliance
60. Peripheral proximity
61. Persistence
62. Perseveration
63. Physical aggression
64. Playful contact
65. Social withdrawal from a negative approach
66. Positive seeking attention
67. Social participation
68. Praise
69. Rebelling
70. Redirection
71. Rejection
72. Return to self-interrupted activity
73. Seeking help
74. Seeking praise and approval
75. Self-assertion
76. Self-interrupted
77. Sharing
78. Showing
79. Socially withdrawn
80. Success
81. Suggestion
82. Taking initiative
83. Teasing
84. Threat
85. Verbal aggression
86. Withdrawal
87. Unintentional physical contact
88. Active non-acceptance
89. Observer response
90. Positive direction
91. Negative direction

Note: The 91 categories will be referred to as the "75" categories as the first 16 categories (1-16) are descriptive categories used for the coding analysis.

* The category that formerly existed as 19 was observed to be too similar to anouther category and subsequently dropped.

Table 4: Social Interaction Categories

Approaching				In Contact				Terminating			
(negative)	(neutral)	(positive)	(mixed)	(negative)	(neutral)	(positive)	(mixed)	(negative)	(neutral)	(positive)	(mixed)
Boasting	Glancing	Crying	Directing	Boasting	Imitation	Active acceptance	Active non-acceptance	Negative looking away	Moving away	Positive looking away	Actively no cepting
Destruction	Involved looking	Facilitating	Playful contact	Destruction		Affection	Asserting self	No response			Asserting s
Hoarding	Moving toward	Giving affection	Redirecting	Hoarding		Compliance	Competition	Rebelling			
Interference	Unintentional physical contact	Helping		Manipulation		Cooperation	Directing	Rejecting			
Negative directing		Intentional physical contact		Negative attention seeking		Dramatic play (with others)	Partial compliance	Socially withdrawn			
Negative social participation		Inviting		Negative social participation		Helping	Playful contact				
Physical aggression		Modeling		Physical aggression		Intentional physical contact	Redirecting				
Redirection		Positive directing		Teasing		Modeling					
Seeking attention		Positive seeking help		Threatening		Passive compliance					
Teasing		Praise				Positive directing					
Threatening		Seeking attention				Praise					
Verbal aggression		Seeking praise & approval				Seeking approval					
		Sharing				Seeking attention					
		Showing				Seeking help					
		Social participation				Sharing					
		Suggesting				Social participation					
						Suggesting					

Table 4 (cont'd)

Task Related Categories

APPROACHING	IN CONTACT	TERMINATING or NOT-IN-CONTACT	COMPLETION
Taking Initiative	Goal Directed alone	Self Interruption	Completion
	Dramatic Play alone		
	Parallel Play		
Return to self-interrupted activity	Organized Activity	Involved - non-involved	
	Group Goal Directed	Giving up	
		Failure	
		Non-involved	
	Persistence		
	Function Pleasure		
	Perseveration		

Table 5: Interaction Schema I

Categories for Observational Study of Infant Day Care. Category Stage III

Approaching Contact

(Negative)	(Neutral)	(Positive)	(Mixed)
Dependency negative attention seeking **Egocentrism** hoarding boasting **Influence** negative directing **Verbal aggression** threatening teasing miscellaneous, e.g., yelling, derogating* angry speech* **Physical aggression** interfering hurting* destroying	**Dependency** involved looking glancing unintentional physical contact	**Dependency** seeking attention seeking help seeking approval crying **Affiliation** inviting showing conversing* sharing **Directive influence** modeling positive directing **Nondirective influence** suggesting facilitating **Nurturance** giving affection praising helping intentional physical contact	**Directive influence** directing redirecting **Affiliation** playful contact

Maintaining or Continued Contact

(Negative)	(Neutral)	(Positive)	(Mixed)
Dependency negative attention seeking **Egocentrism** boasting hoarding **Non-compliant behavior** no response rebelling **Verbal aggression** threatening teasing miscellaneous, e.g., yelling, derogating* angry speech* **Physical aggression** interfering hurting* destroying **Influence** negative directing	**Dependency** involved looking imitation unintentional physical contact	**Dependency** seeking attention seeking help seeking approval passive compliance* **Affiliation** conversing* cooperating showing dramatic play with others sharing **Directive influence** positive directing modeling **Nondirective influence** suggesting facilitating intentional physical contact **Nurturance** praising helping (~~sharing~~ giving affection (Positive, cont'd) active compliance* **Assertion** active acceptance	partial compliance **Affiliation** playful contact competing **Directive influence** directing redirecting **Assertion** asserting self actively non-accepting

Table 5 (cont'd)

Terminating Contact				Activity Orientation		
(Negative)	(Neutral)	(Positive)	(Mixed)	Task-Oriented	Self-Oriented	Non-Oriented
Rejection actively refusing interaction* withdrawal from a positive approach* withdrawal from a negative approach* Non-compliant behavior no response	....	....	Assertion asserting self actively non-accepting	Taking initiative Goal determination adult-directed: works alone* shares activity* self-directed Persistence Perseveration Completes task Gives up	Function pleasure Ego-centric speech	Aimless*

Note: Underlined words represent headings.

* These categories have been renamed:

miscellaneous, e.g., yelling = verbal aggression
angry speech = social participation with negative affect
hurting = physical aggression
conversing = social participation
passive compliance = compliance
active compliance = active acceptance
actively refusing interaction = rejecting
withdrawal from a positive approach = social withdrawal from a positive approach
withdrawal from a negative approach = social withdrawal from a negative approach

adult-directed: works alone = goal-directed alone
adult directed: shares activiey = group goal-directed
aimless = non-involved

Table 6: **Interaction Schema II**

1= Dependency (negative approach)
2= Egocentricism (negative approach)
3= Directive influence (negative approach)
4= Verbal aggression (negative approach)
5= Physical aggression (negative approach)

6= Dependency (neutral approach)
7= Unintentional physical contact(neutral approach)

8= Dependency (positive approach)
9= Affiliation (positive approach)
10= Directive influence (positive approach)
11= Non-directive influence (positive approach)
12= Nurturance (positive approach)
13= Intentional physical contact (positive approach)

14= Directive influence (mixed approach)
15= Affiliation (mixed approach)
16= Assertion (mixed approach)

17= Egocentrism (negative maintaining)
18= Non-compliant behavior (negative maintaining)
19= Crying (negative maintaining)
20= Verbal aggression (negative maintaining)
21= Physical aggression (negative maintaining)
22= Directive influence (negative maintaining)
23= Dependency (negative maintaining)

24= Dependency (neutral maintaining)
25= Unintentional physical contact (neutral maintaining)

26= Dependency (positive maintaining)
27= Passive compliance (positive maintaining)
28= Affiliation (positive maintaining)
29= Directive influence (positive maintaining)
30= Non-directive influence (positive maintaining)
31= Intentional physical contact (positive maintaining)
32= Nurturance (positive maintaining)
33= Assertion (positive maintaining)

34= Partial compliance (mixed maintaining)
35= Affiliation (mixed maintaining)
36= Directive influence (mixed maintaining)
37= Assertion (mixed maintaining)

38= Rejection (negative terminating)
39= Non-compliant behavior (negative terminating)

40= Assertion (mixed terminating)

41= Taking initiative (task oriented)
42= Goal determination (task oriented)

43= Perseveration (task oriented)
44= Gives up (task oriented)
45= Function pleasure (self oriented)
46= Egocentric speech (self-oriented)

47= Aimless (non-oriented)

Table 7: Interaction Schema III

1= Dependency (negative approach and maintaining)
2= Egocentrism (negative approach)
3= Directive influence (negative approach and maintaining)
4= Verbal aggression (negative approach and maintaining)
5= Physical aggression (negative approach and maintaining)

6= Dependency (neutral approach and maintaining)
7= Unintentional physical contact (neutral approach and maintaining)

8= Dependency (positive approach and maintaining)
9= Affiliation (positive approach and maintaining)
10= Directive influence (positive approach and maintaining)
11= Non-directive influence (positive approach and maintaining)
12= Nurturance (positive approach and maintaining)
13= Intentional physical contact (positive approach and maintaining)

14= Directive influence(positive approach and maintaining)
15= Affiliation (positive approach and maintaining)
16= Assertion (positive approach and maintaining)

17=
18= Crying (negative maintaining)

19= Passive compliance (positive maintaining)
20= Assertion (positive maintaining)

21= Partial compliance (mixed maintaining)

22= Rejection (negative terminating)
23= Non-compliant behavior (negative terminating)

24= Assertion (mixed terminating)

25= Taking initiative (task oriented)
26= Goal determination (task oriented)

27= Perseveration (task oriented)
28= Gives up (task oriented)
29= Function pleasure (self oriented)
30= Egocentric speech (self-oriented)

31= Aimless (non-oriented)

Table 8

Coder Reliability on the 75 Categories

Variable	Coder Reliability (N=9)
Not Applicable	.984
No Response	.964
Active Acceptance	.986
Affection	1.000
Compliance	.896
Direction	.836
Egocentric Speech	.915
Glance	.930
Group Goal Directed	.992
Help	.737
Imitation	1.000
Interference	.924
Involved - Non-Involved	1.000
Involved Looking	.974
Inviting	1.000
Modeling	1.000
Moving Away	.768
Moving Toward	.916
Crying	1.000
Non-Involved	.969
Organized Activity	.999
Parallel Play	.863
Partial Compliance	1.000
Peripheral Proximity	1.000
Physical Aggression	.992
Playful Contact	1.000
Positive Seeking Attention	1.000
Social Participation	.991
Praise	1.000
Rebelling	.977
Redirection	.967
Rejection	1.000
Seeking Help	.956
Seeking Praise	.750
Self-Assertion	1.000
Self-Interrupted	.868
Sharing	1.000
Showing	1.000
Socially Withdrawn	1.000
Suggestion	1.000
Taking Initiative	.9801
Teasing	1.000
Verbal Aggression	1.000
Unintentional Physical Contact	.9524
Active Non Acceptance	1.000
Observer Response	.988

Note: Reliability could not be calculated for the following variables as they were not observed by either judge: competition, cooperation, destruction, dramatic play with others, embarassment, failure, function pleasure, giving up, hoarding, involved - non-involved, manipulation, moving away, moving towards, non-involved, peripheral proximity, physical aggression, social withdrawal from a negative approach, teasing, and withdrawal.

Table 9

Observer Reliability on the 75 Categories

Variable	Observer Reliability (N=6)
Not Applicable	.924
No Response	.962
Active Acceptance	.9858
Boasting	1.000
Compliance	.987
Cooperation	.984
Direction	.864
Dramatic Play - Others	1.000
Egocentric Speech	.984
Facilitation	1.000
Glance	.9563
Group Goal Directed	1.000
Help	.998
Imitation	1.000
Interference	1.000
Intentional Physical Contact	.921
Involved Looking	.9070
Inviting	.9439
Modeling	1.000
Social Withdrawal - Positive	1.000
Negative Seeking Attention	1.000
Organized Activity	1.000
Perseveration	.960
Physical Aggression	.941
Positive Seeking Attention	1.000
Rebelling	.949
Return to Self-Interrupted Activity	1.000
Seeking Help	1.000
Sharing	.9753
Success	1.000
Suggestion	.976
Threat	
Verbal Aggression	1.000
Active Non-Contact Acceptance	1.000
Observer Response	1.000
Positive Direction	.849
Negative Direction	.909

Note: Reliability could not be calculated for the following variables as they were not observed by either judge: boasting, competition, cooperation, destruction, dramatic play with others, embarassment, failure, hoarding, manipulation, negative attention seeking, persistance, and perserveration.

Table 10: Reliabilities for Timing Variables

Variable No.	Variable Name	Mean Judge 1	Mean Judge 2	Reliability Coefficient	Range of Judge 1	Range of Judge 2	Absolute Differences Between Judges' Means
1	Goal directed alone	237.77	234.11	.992	60-442	48-424	13
2	Group goal directed	169.77	161.11	.992	0-551	0-545	15.55
3	Organized group directed	286.22	283.11	.999	0-515	0-512	6.22
4	Dramatic play alone	0	0	0	0-0	0-0	0.0
5	Dramatic play with others	54.44	56.88	.999	0-250	0-272	4.66
6	Cooperative play	77.00	64.44	.9710	0-225	0-232	14.11
7	Parallel play	10.88	0	0	0-53	0-0	10.89
8	Competition	2.11	2.22	.964	0-15	0-20	1.00
9	Intentional physical contact	22.11	21.44	.962	0-128	0-100	7.11
10	Playful contact	14.88	11.11	.86	0-78	0-100	8.66
11	Involved looking	101.22	107.11	.849	16-210	12-324	29.67
12	Time alone	221.44	228.22	.991	20-377	25-436	13.22
13	Time with others	107.55	923.66	.967	739-1180	791-1170	26.11
14	Non-involved	11.22	13.55	.935	0-52	0-60	5.67
15	Social participation	271.55	241.33	.575	141-384	143-445	74.22

$\underline{r}(7) = .67$, $\underline{p} = .05$.

$\underline{r}(7) = .80$, $\underline{p} = .01$.

Table 11: Reliability on Ratings of Teacher Functioning

Variable No.	Variable Name	Mean Judge 1	Mean Judge 2	Reliability Coefficient	Range of Judge 1	Range of Judge 2	Absolute Difference Between Judges' Mea
1	Sensitivity	5.73	5.82	.87	2 - 8	3 - 8	.81
2	Individual vs group needs	5.10	4.63	.84	2 - 8	2 - 6	1.18
3	Approach to learning	4.90	5.10	.41	2 - 7	3 - 7	1.09
5	Control of materials - choice	4.45	4.54	.76	3 - 7	2 - 7	.82
6	Control of materials - use	5.45	5.45	.85	3 - 7	2 - 8	.91
7	Facilitation	6.10	6.63	.94	2 - 9	4 - 9	.91
8	Intrusiveness	4.91	4.63	.75	2 - 7	3 - 7	1.00
9	Praise & approval	4.10	4.81	.68	1 - 8	3 - 8	1.27
10	Criticism & disapproval	4.10	4.10	.89	3 - 6	3 - 7	.36
11	Expressed affection	5.90	6.00	.93	2 - 9	3 - 9	.64
12	Use of time - 1	5.63	4.54	.34	3 - 7	3 - 5	1.46
13	Use of time - 2	5.81	5.81	.87	3 - 8	3 - 7	.91
14	Use of time - 3	3.18	2.90	.84	1 - 6	2 - 4	.82
15	Distinction between work & play	4.63	5.10	.72	2 - 7	3 - 8	1.00
16	Amount of control	4.10	4.81	.92	2 - 7	2 - 8	.73
17	Classroom arrangement structure	3.54	4.36	.88	2 - 7	2 - 7	.82
18	Classroom arrangement-free play	7.10	6.90	.78	3 - 8	4 - 8	.55
19	Responsiveness	6.00	6.18	.71	3 - 8	4 - 8	.91
20	Verbal interaction	5.54	5.18	.79	3 - 7	3 - 7	.73

TABLE 12

PRODUCT MOMENT COEFFICIENTS OF CORRELATION (r) BETWEEN OBSERVERS ON RATINGS OF TEACHING STYLES AND TECHNIQUES INVOLVING EIGHT OBSERVERS AND SIXTY-FOUR TEACHERS ASSISTANTS AND AIDS

DIMENSION	(N)	r*
Praise	64	.46
Criticism	64	.67
Closeness to Children	68	.64
Sensitivity	59	.63
Control over Children	64	.74
Distinction between Work and Play	49	.55
Group vs. Individual Needs	64	.59
Programming	56	.76
Approach to Learning	53	.64
Classroom Arrangement	60	.67
Control of Materials	64	.75

* Significance of all r's = $p < .01$

* Adapted from Beller, E. K. & Shain, R. A. "A study of different nursery environments and changes in cognitive and emotional functioning of three and four-year-old children." Paper presented at the International Congress of Child Psychiatry, Philadelphia, 1974.

TABLE 13

ROTATED FACTOR MATRIX FOR TEACHER RATINGS
BASED ON 41 MAIN TEACHERS

VARIABLES	FACTOR I	FACTOR II	FACTOR III
1. Praise	-.85	.06	.04
2. Criticism	.62	.52	.35
3. Closeness to Children	-.89	-.09	-.26
4. Sensitivity	-.76	-.27	-.30
5. Control over Children	.62	.59	.22
6. Distinction between Work and Play	.75	.24	.37
7. Group vs. Individual Needs	-.02	-.89	-.20
8. Programming	.17	.92	.23
9. Approach to Learning	.09	.24	.88
10. Classroom Arrangement	.37	.23	.76
11. Control of Materials	.52	.23	.67

* Adapted from Beller, E. K. & Shain, R. A. "A study of different nursery environments and changes in cognitive and emotional functioning of three and four-year-old children." Paper presented at the International Congress of Child Psychiatry, Philadelphia, 1974.

Table 14

Number of Teachers Observed on the "Ratings of Teacher Functioning Scales"

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	6	6
	Heterogeneous	6	6

Table 15

Number of boys and girls pre-tested at 12 months and post-tested at 24 months attending day care centers with different group compositions

Group Compositions*		Twelve Month Pre-Test			Twenty-four Month Post Test		
Age	Social Class	Boys	Girls	Total	Boys	Girls	Total
HO *	HO	8	14	22	5	4	9
HO	HE *	1	2	3	1	1	2
HE	HO	4	6	10	3	3	6
HE	HE	0	4	4	0	1	1
Totals		13	26	39	9	9	18

* HO indicates homogeneous; HE indicates heterogeneous

Table 16

Number of boys and girls pre-tested at 24 months and post-tested at 36 months attending day care centers with four different group compositions.

Group Compositions*		Twenty-four Month Pre-Test			Thirty-six Month Post-Test		
Age	Social Class	Boys	Girls	Total	Boys	Girls	Total
HO	HO	9	13	22	7	6	13
HO	HE	7	12	19	3	8	11
HE	HO	9	3	12	3	2	5
HE	HE	3	4	7	1	4	5
Totals		28	32	60	14	20	34

*HO indicates homogeneous; HE indicates heterogeneous.

Table 17

Number of boys and girls pre-tested at 36 months and post-tested at 48 months attending day care centers with four different group compositions.

Group Compositions*		Thirty-six Month Pre-Test			Forty-eight Month Post-Test		
Age	Social Class	Boys	Girls	Total	Boys	Girls	Total
HO	HO	12	16	28	11	11	22
HO	HE	10	6	16	7	4	11
HE	HO	1	0	1	1	0	1
HE	HE	4	4	8	3	2	5
Totals		27	26	53	22	17	39

* HO indicates homogeneous; HE indicates heterogeneous.

Table 18

Day care centers with four different group compositions participating at each pre-test age level.

Group Compositions*		Twelve Month Pre-Test	Twenty-four Month Pre-Test	Thirty-six Month Pre-Tes
Age	Social Class			
HO	HO	New Horizons Rebound	New Horizons Rebound Rosen Richard Allen W. 80th Street	Rosen Richard Allen Get Set Centers (Bright Hope, Morris, Macedonia, Wayland Temple, etc.)
HO	HE	St. Chris	Durham King	King Riverside St. Chris
HE	HO	YGS (Wave 2)	YGS (Wave 2) Seton	YGS (Wave 2)
HE	HE	TLC YGS (Wave 1)	TLC Fox Chase	TLC Fox Chase

---

* HO indicates homogeneous; HE indicates heterogeneous.

Table 19

Trust situations used in the study of twelve months old children.*

Situation	Materials Needed
Infant seated on caregiver's (CG) lap.	
1. E** enters room and smiles at infant.	
2. E talks to infant in a cheerful manner.	
3. E approaches infant.	
4. E touches infant's hand.	
5. E picks infant up.	
6. E carries infant behind barrier.	
7. CG leaves the room.	
8. E returns from behind barrier and wiggles infant in the air.	
9. E places child into infant table.	Rattle
10. E offers infant a toy.	
11. E departs.	
12. CG enters.	
13. CG approaches infant and touches his hand.	
14. CG picks infant up.	
15. CG wiggles infant in the air.	
16. CG places child into infant table.	
17. CG offers infant a toy.	Rattle
18. CG departs.	
19. CG and E return.	

* For complete description of room setting, experimenter and observer roles, and situations refer to Appendix G1.

** E = Unfamiliar person

Table 20

Trust situations used in the study of twenty-four months old children.*

	Situation	Materials Needed
1.	Caregiver (CG) and child are seated.	
2.	E** enters room.	
3.	E sits down to play.	Two-piece formboard
4.	E invites child to play with her.	
5.	E invites child to sit on her lap.	
6.	E invites child to go to a different room to get a new toy.	
7.	E and child return with new toy.	Three-piece formboard
8.	E and child play together with new toy.	
9.	E rolls circle form, then ball and asks child to do the same.	Small, rubber ball
10.	E rolls ball on board.	Board set on 6" cardboard blocks
11.	E asks child to walk on the board while holding her hand	
12.	CG asks child to walk on the board while holding her hand.	

---

* For complete description of room setting, experimenter and observer roles, and situations refer to Appendix G2.

** E = unfamiliar person.

Table 21

Trust situations used in the study of thirty-six and forty-eight months old children.*

Situation	Materials Needed
1. Caregiver (CG) and child are seated in "waiting room".	
2. E** enters and gives child a toy.	Toy small enough to fit in a pocket.
3. E invites child to go to experimental room with her (without CG).	
4. Toe-touching (warm-up).	
5. E rocks from side to side and asks child to do the same.	
6. E asks child to hold hands while rocking.	
7. E asks child to sit on her lap.	
8. E blindfolds child.	Blindfold
9. E asks child to walk on board, holding her hand, while blindfolded.	Board set on 6" cardboard bricks
10. E removes blindfold and asks child to jump from a chair.	Straight-backed, adult size chair.
11. CG enters room.	
12. CG blindfolds child.	
13. CG asks child to walk on board, holding her hand, while blindfolded.	
14. CG removes blindfold and asks child to jump from a chair.	

* For complete description of room setting, experimenter and observer roles, and situations refer to Appendix G-3.

** E = Unfamiliar person.

Table 22

Persistence tasks used in the study of twelve months old children.*

Tasks	Length of Time
1. Nesting Blocks	Seven minutes
2. Receptive Looking and Listening (E shows child pictures in a book.)	Two minutes
3. Retrieving Telephone from Plastic Bag:	
a. Telephone completely inside of bag.	Five minutes
b. Telephone partially removed.	Two minutes
4. Building a Tower with Blocks.	Five minutes
5. Toy Under Jar	Two minutes

* For complete description of room setting, materials, experimenter and observer roles, and tasks refer to Appendix G-4.

Table 23

Persistence tasks used in study of twenty-four and thirty-six months old children.*

Tasks	Length of Time
1. Keys of Learning	Five minutes
2. Stacking Cups and Saucers	Five minutes
3. Three Puzzles	Five minutes
4. Three Books	Three minutes
5. Candy in a Jar	Two minutes

* For complete description of room setting, materials, experimenter and observer roles, and tasks refer to Appendix G-5.

Table 24

Persistence tasks used in the study of forty-eight months old children.*

Tasks	Length of Time
1. Fun Flowers	Five minutes
2. Stacking Balls and Rings	Five minutes
3. Three Puzzles	Five minutes
4. Three Books	Three minutes
5. Candy in Magic Box	Two minutes

* For complete description of room setting, materials, experimenter and observer roles, and tasks refer to Appendix G-6.

Table 25.1

Coefficients of Reliability Within Site, 6 & 12 Months-Continued 4
Trust Scale

Item	
58. intensity of exploration	0
16. M. Leaves slowly	
59. looks at M.	1.00
60. positive affect	*
61. negative affect	1.00
62. environmental control	.76[a]

a[1]: 2 observers, 4 children, $r=.80$, $p<.05$.
b[2]: 5 observers, 3 children, $r=.90$, $p<.05$.
c[3]: 2 observers, 4 children, $r=.80$, $p<.05$.
d[4]: 2 observers, 15 children, $r=.43$, $p<.05$.
*No variation among children, all 0.
[a] Not reliable.

Table 25.2

Coefficients of Reliability Within Site, Trust Scale at 24 Months

Item	Coefficient
1. Immediate response to new person	
1. positive affect	*
2. negative affect	1.00
3. tension	.97
4. approach-avoidance	.84
2. Delayed response to new person	
5. positive affect	*
6. negative affect	*
7. tension	1.00
8. approach-avoidance	.98
3. Approach to new person	
9. approach-avoidance	.99
10. positive affect	1.00
11. negative affect	.93
12. tension	1.00
13. interest in toy	.96
4. Invitation to lapsitting	
14. approach-avoidance	1.00
15. positive affect	*
16. negative affect	*
17. tension	1.00

Table 25.2

Coefficients of Reliability Within Site, 24 Months-Continued 2
Trust Scale

Item	Coefficient
5. Reaction to being taken to new room	
18. accept-refuse	1.00
19. positive affect	1.00
20. negative affect	.93
21. tension	.89
6. Reaction to E. during play with new toy	
22. approach-avoidance	.82
23. positive affect	.98
24. negative affect	*
25. tension	1.00
7. Reaction to ball-rolling game	
26. participate-avoid	.99
27. positive affect	1.00
28. negative affect	*
29. tension	1.00
8. Rolling ball on board	
30. participate-avoid	.98
31. positive affect	1.00
32. negative affect	.92
33. tension	1.00
9. Walking the board with E's hand	
34. participate-avoid	1.00
35. handholding	1.00

Table 25.2

Coefficients of Reliability Within Site, 24 Months-Continued 3
Trust Scale

Item	Coefficient
36. positive affect	.87
37. negative affect	1.00
38. tension	.97

a[1]: 2 observers, 3 children, r=.90, $p < .05$.
b[2]: 5 observers, 4 children, r=.80, $p < .05$.
c[3]: 2 observers, 2 children, r=.98, $p < .05$.
*No variation among children, all 0.
[a]Not reliable.

Table 25.3

Trust Scale at 36 Months, Within Site
Coefficients of Reliability

Item	Coefficient
4. Rocking task	
8. positive affect	1.00
9. negative affect	.79[a]
10. tension	1.00
11. participate-refuse	1.00
5. Rocking - holding hands	
12. positive affect	1.00
13. negative affect	1.00
14. tension	.75[a]
15. participate-refuse	1.00
16. approach-avoidance	.71[a]
6. Lapsitting	
17. positive affect	1.00
18. negative affect	1.00
19. tension	1.00
20. approach-avoidance	1.00
7. Blindfolding	
21. positive affect	1.00
22. negative affect	1.00
23. tension	.83[a]
24. accept-refuse	1.00

Table 25.3

Trust Scale at 36 Months Within Site Coefficients of Reliability-Continued 2

Item	Coefficient
8. Walking the board	
25. positive affect	*
26. negative affect	*
27. tension	1.00
28. approach-avoidance	1.00
9. Jumping	
29. positive affect	.79[a]
30. negative affect	.79[a]
31. tension	.82[a]
32. approach-avoidance	1.00

a^1: 2 observers, 5 children, r=.73, $p < .05$.
b^2: 5 observers, 2 children, r=.98, $p < .05$.
c^3: 2 observers, 2 children, r=.98, $p < .05$.
*No variation among children, all 0.
[a] Not reliable.

Table 25.4

Coefficients of Reliability Within Site
Persistence Scale at 6 Months
Task 1, Blocks

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	.86
3.	Average E goal intensity	.86
4.	# on E goal	.84
5.	Average C goal time	.91
6.	Average C goal intensity	.99
7.	# on C goal	.97
8.	# on C and E goal combined	.94
9.	Average E and C goal time	.90
10.	Average Affect	.98
11.	# of Psychological Interruptions	.91
12.	# of Physical Interruptions	*
13.	# of External Distractions	.95
14.	# of Completes Task	*
15.	# of Instrumental E	*
16.	# of Instrumental M	*
17.	# of Emotional E	.80
18.	# of Emotional M	*
19.	# of Glances at E	.85
20.	# of Glances at M	*
21.	# of Self-Stimulations	*
22.	# of Agressions	*

a^1: 2 observers, 5 children, $r=.73$, $p<.05$.

b^2: 2 observers, 2 children, $r=.98$, $p<.05$.

* : No variation among children.

25.5
Coefficients of Reliability Within Site
Persistence Scale at 6 Months
Task 2, Book

Item	Coefficient
1. Response latency	*
2. Average E goal time	1.00
3. Average E goal intensity	.98
4. # on E goal	1.00
5. Average C goal time	*
6. Average C goal intensity	*
7. # on C goal	*
8. # on C and E goal combined	1.00
9. Average E and C goal time	1.00
10. Average Affect	.99
11. # of Psychological Interruptions	.95
12. # of Physical Interruptions	*
13. # of External Distractions	*
14. # of Completes Task	*
15. # of Instrumental E	*
16. # of Instrumental M	*
17. # of Emotional E	*
18. # of Emotional M	*
19. # of Glances at E	*
20. # of Glances at M	*
21. # of Self-Stimulations	*
22. # of Aggressions	*

a^1: 2 observers, 5 children, $r=.73$, $p<.05$.
b^2: 2 observers, 2 children, $r=.98$, $p<.05$.
* : No variation among children.

Coefficients of Reliability Within Site
Persistence Scale at 6 Months
Task 3, Bell Play

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	.99
3.	Average E goal intensity	.99
4.	# on E goal	.99
5.	Average C goal time	1.00
6.	Average C goal intensity	.98
7.	# on C goal	1.00
8.	# on C and E goal combined	1.00
9.	Average E and C goal time	1.00
10.	Average Affect	1.00
11.	# of Psychological Interruptions	.98
12.	# of Physical Interruptions	*
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	*
16.	# of Instrumental M	*
17.	# of Emotional E	.75
18.	# of Emotional M	*
19.	# of Glances at E	.90
20.	# of Glances at M	*
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

a^1: 2 observers, 5 children, $r=.73$, $p<.05$.
b^2: 2 observers, 2 children, $r=.98$, $p<.05$.
* : No variation among children.

Coefficients of Reliability Within Site
Persistence Scale at 6 Months
Task 4, Beans in Jar

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	1.00
3.	Average E goal intensity	1.00
4.	# on E goal	1.00
5.	Average C goal time	1.00
6.	Average C goal intensity	1.00
7.	# on C goal	1.00
8.	# on C and E goal combined	1.00
9.	Average E and C goal time	1.00
10.	Average Affect	1.00
11.	# of Psychological Interruptions	*
12.	# of Physical Interruptions	*
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	*
16.	# of Instrumental M	*
17.	# of Emotional E	*
18.	# of Emotional M	*
19.	# of Glances at E	*
20.	# of Glances at M	*
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

a^1: 2 observers, 5 children, r=.73, $p < .05$.
b^2: 2 observers, 2 children, r=.98, $p < .05$.
* : No variation among children.

Table 23.8

Coefficients of Reliability Within Site
Persistence Scale at 12 Months
Task 1, Nesting Cups

Item		Coefficient
1.	Response latency	*
2.	Average E goal time	.98
3.	Average E goal intensity	.97
4.	# on E goal	.97
5.	Average C goal time	1.00
6.	Average C goal intensity	.96
7.	# on C goal	1.00
8.	# on C and E goal combined	.99
9.	Average E and C goal time	.99
10.	Average Affect	.99
11.	# of Psychological Interruptions	.98
12.	# of Physical Interruptions	.87
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	*
16.	# of Instrumental M	*
17.	# of Emotional E	.82
18.	# of Emotional M	1.00
19.	# of Glances at E	.97
20.	# of Glances at M	.85
21.	# of Self-Stimulations	.80
22.	# of Aggressions	*

a^1: 2 observers, 10 children, $r=.52$, $p<.05$.
b^2: 2 observers, 2 children, $r=.98$, $p<.05$.
c^3: 2 observers, 3 children, $r=.90$, $p<.05$.
d^4: 5 observers, 2 children, $r=.98$, $p<.05$
* : No variation among children.

Table 25.9
Coefficients of Reliability Within Site
Persistence Scale at 12 Months
Task 2, Book

Item	Coefficient
1. Response latency	*
2. Average E goal time	1.00
3. Average E goal intensity	.99
4. # on E goal	1.00
5. Average C goal time	*
6. Average C goal intensity	*
7. # on C goal	*
8. # on C and E goal combined	1.00
9. Average E and C goal time	1.00
10. Average Affect	1.00
11. # of Psychological Interruptions	.85
12. # of Physical Interruptions	.80
13. # of External Distractions	*
14. # of Completes Task	*
15. # of Instrumental E	*
16. # of Instrumental M	1.00
17. # of Emotional E	*
18. # of Emotional M	*
19. # of Glances at E	*
20. # of Glances at M	*
21. # of Self-Stimulations	.90
22. # of Aggressions	*

a[1]: 2 observers, 10 children, $r=.52$, $p<.05$.
b[2]: 2 observers, 2 children, $r=.98$, $p<.05$.
c[3]: 2 observers, 3 children, $r=.90$, $p<.05$.
d[4]: 5 observers, 2 children, $r=.98$, $p<.05$.

*No variation among children.

Table 25.10
Coefficients of Reliability Within Site
Persistence Scale at 12 Months
Task 3, Telephone **

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	.98
3.	Average E goal intensity	.97
4.	# on E goal	.95
5.	Average C goal time	.99
6.	Average C goal intensity	1.00
7.	# on C goal	.99
8.	# on C and E goal combined	.99
9.	Average E and C goal time	.98
10.	Average Affect	1.00
11.	# of Psychological Interruptions	.95
12.	# of Physical Interruptions	.90
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	*
16.	# of Instrumental M	*
17.	# of Emotional E	.97
18.	# of Emotional M	.95
19.	# of Glances at E	.97
20.	# of Glances at M	*
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

a^1: 2 observers, 10 children, $r=.52$, $p < .05$.
b^2: 2 observers, 2 children, $r=.98$, $p < .05$.
c^3: 2 observers, 3 children, $r=.90$, $p < .05$.
d^4: 5 observers, 2 children, $r=.98$, $p < .05$.
* : No variation among children.

**Site c^3, no data was available.

Table 25.11
Coefficients of Reliability Within Site
Persistence Scale at 12 Months
Task 4, Stacking Blocks

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	.98
3.	Average E goal intensity	.96
4.	# on E goal	.94
5.	Average C goal time	1.00
6.	Average C goal intensity	.97
7.	# on C goal	.94
8.	# on C and E goal combined	.94
9.	Average E and C goal time	.99
10.	Average Affect	.99
11.	# of Psychological Interruptions	.97
12.	# of Physical Interruptions	*
13.	# of External Distractions	.90
14.	# of Completes Task	*
15.	# of Instrumental E	*
16.	# of Instrumental M	*
17.	# of Emotional E	.90
18.	# of Emotional M	*
19.	# of Glances at E	.95
20.	# of Glances at M	*
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

a^1: 2 observers, 10 children, r=.52, $p < .05$.
b^2: 2 observers, 2 children, r=.98, $p < .05$.
c^3: 2 observers, 3 children, r=.90, $p < .05$.
d^4: 5 observers, 2 children, r=.98, $p < .05$.

*No variation among children.

Table 25.12

Coefficients of Reliability Within Site
Persistence Scale at 12 Months
Task 5, Beans in Jar

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	1.00
3.	Average E goal intensity	.99
4.	# on E goal	.95
5.	Average C goal time	.93
6.	Average C goal intensity	.90
7.	# on C goal	.95
8.	# on C and E goal combined	1.00
9.	Average E and C goal time	.99
10.	Average Affect	.98
11.	# of Psychological Interruptions	.99
12.	# of Physical Interruptions	*
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	*
16.	# of Instrumental M	*
17.	# of Emotional E	*
18.	# of Emotional M	*
19.	# of Glances at E	1.00
20.	# of Glances at M	*
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

a^{1}: 2 observers, 10 children, $r=.52$, $p<.05$.
b^{2}: 2 observers, 2 children, $r=.98$, $p<.05$.
c^{3}: 2 observers, 3 children, $r=.90$, $p<.05$.
d^{4}: 5 observers, 2 children, $r=.98$, $p<.05$.

*No variation among children

Table [illegible]
Coefficients of Reliability Within Site
Persistence Scale at 24 Months
Task 1, Keys to Learning

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	.92
3.	Average E goal intensity	.94
4.	# on E goal	1.00
5.	Average C goal time	.92
6.	Average C goal intensity	.97
7.	# on C goal	.90
8.	# on C and E goal combined	.94
9.	Average E and C goal time	.92
10.	Average Affect	.99
11.	# of Psychological Interruptions	1.00
12.	# of Physical Interruptions	.94
13.	# of External Distractions	.94
14.	# of Completes Task	*
15.	# of Instrumental E	.97
16.	# of Instrumental M	.97
17.	# of Emotional E	.76
18.	# of Emotional M	.95
19.	# of Glances at E	1.00
20.	# of Glances at M	.95
21.	# of Self-Stimulations	.91
22.	# of Aggressions	*

b^2: 2 observers, 4 children, r=.80, $p < .05$.
c^3: 2 observers, 3 children, r=.90, $p < .05$.
d^4: 5 observers, 3 children, r=.90. $p < .05$.
* : No variation among children.

Site b^2 combined persistence at 24 and 36 months.

Table 25.14
Coefficients of Reliability Within Site
Persistence Scale at 24 Months
Task 2, Stacking Cups

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	.90
3.	Average E goal intensity	.93
4.	# on E goal	.97
5.	Average C goal time	.96
6.	Average C goal intensity	.95
7.	# on C goal	.90
8.	# on C and E goal combined	.93
9.	Average E and C goal time	.92
10.	Average Affect	1.00
11.	# of Psychological Interruptions	.93
12.	# of Physical Interruptions	.96
13.	# of External Distractions	.93
14.	# of Completes Task	*
15.	# of Instrumental E	.98
16.	# of Instrumental M	*
17.	# of Emotional E	.88
18.	# of Emotional M	1.00
19.	# of Glances at E	.95
20.	# of Glances at M	.97
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

b^2: 2 observers, 4 children, $r=.80$, $p<.05$.
c^3: 2 observers, 3 children, $r=.90$, $p<.05$.
d^4: 5 observers, 3 children, $r=.90$, $p<.05$.
* : No variation among children.

Site b^2 combined persistence at 24 and 36 months.

Table [illegible]
Coefficients of Reliability Within Site
Persistence Scale at 24 Months
Task 3, Puzzle

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	1.00
3.	Average E goal intensity	.97
4.	# on E goal	.95
5.	Average C goal time	1.00
6.	Average C goal intensity	1.00
7.	# on C goal	.98
8.	# on C and E goal combined	.97
9.	Average E and C goal time	1.00
10.	Average Affect	1.00
11.	# of Psychological Interruptions	.97
12.	# of Physical Interruptions	.90
13.	# of External Distractions	*
14.	# of Completes Task	.95
15.	# of Instrumental E	.98
16.	# of Instrumental M	.98
17.	# of Emotional E	.93
18.	# of Emotional M	.95
19.	# of Glances at E	.92
20.	# of Glances at M	.90
21.	# of Self-Stimulations	*
22.	# of Aggressions	.98

b^2: 2 observers, 4 children, $r=.80$, $p \leq .05$.
c^3: 2 observers, 3 children, $r=.90$, $p \leq .05$.
d^4: 5 observers, 3 children, $r=.90$, $p \leq .05$.
* : No variation among children.

Site b^2 combined persistence at 24 and 36 months.

Table 25.16

Coefficients of Reliability Within Site
Persistence Scale at 24 Months
Task 4, Books

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	1.00
3.	Average E goal intensity	.97
4.	# on E goal	.93
5.	Average C goal time	1.00
6.	Average C goal intensity	1.00
7.	# on C goal	.98
8.	# on C and E goal combined	.96
9.	Average E and C goal time	1.00
10.	Average Affect	.99
11.	# of Psychological Interruptions	.93
12.	# of Physical Interruptions	.92
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	.94
16.	# of Instrumental M	1.00
17.	# of Emotional E	1.00
18.	# of Emotional M	.97
19.	# of Glances at E	.97
20.	# of Glances at M	.97
21.	# of Self-Stimulations	.94
22.	# of Aggressions	.97

b^2: 2 observers, 4 children, r=.80, $p < .05$.
c^3: 2 observers, 3 children, r=.90, $p < .05$.
$d4$: 5 observers, 3 chidren, r=.90, $p < .05$.
* : No variation among children.

Site b^2 combined persistence at 24 and 36 months.

Coefficients of Reliability Within Site
Persistence Scale at 24 Months
Task 5, Candy in a Can

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	1.00
3.	Average E goal intensity	1.00
4.	# on E goal	.98
5.	Average C goal time	.90
6.	Average C goal intensity	.92
7.	# on C goal	.96
8.	# on C and E goal combined	.98
9.	Average E and C goal time	.94
10.	Average Affect	1.00
11.	# of Psychological Interruptions	*
12.	# of Physical Interruptions	*
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	.94
16.	# of Instrumental M	.96
17.	# of Emotional E	*
18.	# of Emotional M	.94
19.	# of Glances at E	.82
20.	# of Glances at M	.97
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

b^2: 2 observers, 4 children, r=.80, $p < .05$.
c^3: 2 observers, 3 children, r=.90, $p < .05$.
d^4: 5 observers, 3 children, r=.90, $p < .05$.
* : No variation among children.

Site b^2 combined persistence at 24 and 36 months.

Coefficients of Reliability Within Site
Persistence Scale at 36 Months
Task 1, Keys to Learning

Item	Coefficient
1. Response latency	*
2. Average E goal time	.98
3. Average E goal intensity	.97
4. # on E goal	1.00
5. Average C goal time	1.00
6. Average C goal intensity	.98
7. # on C goal	1.00
8. # on C and E goal combined	1.00
9. Average E and C goal time	1.00
10. Average Affect	.99
11. # of Psychological Interruptions	*
12. # of Physical Interruptions	1.00
13. # of External Distractions	.95
14. # of Completes Task	*
15. # of Instrumental E	*
16. # of Instrumental M	.93
17. # of Emotional E	*
18. # of Emotional M	*
19. # of Glances at E	.94
20. # of Glances at M	.96
21. # of Self-Stimulations	*
22. # of Aggressions	*

c^3: 2 observers, 5 children, $r=.73$, $p < .05$.
d^4: 5 observers, 4 children, $r=.80$, $p < .05$.
* : No variation among children.

Coefficients of Reliability Within Site
Persistence Scale at 36 Months
Task 2, Stacking Cups

Item	Coefficient
1. Response latency	.84
2. Average E goal time	.72
3. Average E goal intensity	.84
4. # on E goal	.85
5. Average C goal time	.95
6. Average C goal intensity	.96
7. # on C goal	.98
8. # on C and E goal combined	.97
9. Average E and C goal time	.94
10. Average Affect	.94
11. # of Psychological Interruptions	.92
12. # of Physical Interruptions	.96
13. # of External Distractions	*
14. # of Completes Task	*
15. # of Instrumental E	*
16. # of Instrumental M	*
17. # of Emotional E	.90
18. # of Emotional M	.76
19. [illegible] of Glances at E	.95
20. [illegible] of Glances at M	.98
21. [illegible] of Self-Stimulations	*
22. [illegible] Aggressions	*

[illegible] observers, 5[illegible] children, r=.73, $p < .05$.
[illegible] observers, [illegible] children, r=.80, $p < .05$.
[illegible] variation among children.

Table 25.20
Coefficients of Reliability Within Site
Persistence Scale at 36 Months
Task 3, Puzzle

	Item	Coefficient
1.	Response latency	*
2.	Average E goal time	1.00
3.	Average E goal intensity	1.00
4.	# on E goal	1.00
5.	Average C goal time	*
6.	Average C goal intensity	*
7.	# on C goal	*
8.	# on C and E goal combined	1.00
9.	Average E and C goal time	1.00
10.	Average Affect	1.00
11.	# of Psychological Interruptions	*
12.	# of Physical Interruptions	1.00
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	*
16.	# of Instrumental M	.97
17.	# of Emotional E	1.00
18.	# of Emotional M	*
19.	# of Glances at E	.99
20	# of Glances at M	.96
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

c^3: 2 observers, 5 children, $r=.73$, $p < .05$.
d^4: 5 observers, 4 children, $r=.80$, $p < .05$.
* : No variation among children.

Table 25.21
Coefficients of Reliability Within Site
Persistence Scale at 36 Months
Task 4, Books

	Item	Coefficient
1.	Response latency	.88
2.	Average E goal time	1.00
3.	Average E goal intensity	.99
4.	# on E goal	.98
5.	Average C goal time	.94
6.	Average C goal intensity	.94
7.	# on C goal	.93
8.	# on C and E goal combined	.97
9.	Average E and C goal time	.98
10.	Average Affect	1.00
11.	# of Psychological Interruptions	.93
12.	# of Physical Interruptions	1.00
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	.97
16.	# of Instrumental M	*
17.	# of Emotional E	*
18.	# of Emotional M	*
19.	# of Glances at E	.98
20.	# of Glances at M	*
21.	# of Self-Stimulations	*
22.	# of Aggressions	*

c^3: 2 observers, 5 children, $r=.73$, $p < .05$.
d^4: 5 observers, 4 children, $r=.80$, $p < .05$.
*: No variation among children.

Table 25.22
Coefficients of Reliability Within Site
Persistence Scale at 36 Months
Task 5, Candy in a Can

Item		Coefficient
1.	Response latency	.89
2.	Average E goal time	.99
3.	Average E goal intensity	.91
4.	# on E goal	.95
5.	Average C goal time	.93
6.	Average C goal intensity	.95
7.	# on C goal	.92
8.	# on C and E goal combined	.93
9.	Average E and C goal time	.96
10.	Average Affect	.99
11.	# of Psychological Interruptions	*
12.	# of Physical Interruptions	*
13.	# of External Distractions	*
14.	# of Completes Task	*
15.	# of Instrumental E	.94
16.	# of Instrumental M	.95
17.	# of Emotional E	*
18.	# of Emotional M	*
19.	# of Glances at E	.87
20.	# of Glances at M	.92
21.	# of Self-Stimulations	.88
22.	# of Aggressions	*

c^3: 2 observers, 5 children, $r=.73$, $p < .05$.
d^4: 5 observers, 4 children, $r=.80$, $p < .05$.
* : No variation among children.

Table 26

Summary of Significant Findings From Analyses of Variance of Time Spent on Each of 15 Behavioral Measures in Four Environments*

Variable	Age Main * Effect	Social Class* Main Effect	Interaction
1. Goal directed alone	-	-	.10
2. Group goal directed	-	-	-
3. Organized group directed	-	-	-
4. Dramatic play alone	-	.05	-
5. Dramatic play with others	.10	-	-
6. Cooperative play	-	.05	-
7. Parallel play	.10	-	-
8. Competition	-	-	-
9. Intentional physical contact	-	-	.05
10. Playful contact	-	-	-
11. Involved looking	-	.01	-
12. Time alone	-	.05	-
13. Time with others	.05	.05	-
14. Non-involved	-	.05	-
15. Social participation	-	-	-

*See Table 1

Table 27

Analysis of Variance Summary Table for Timing Variable "Goal Directed Alone" as a Function of Age and Social Class

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	293.14	205.50
		δ	(133.02)	(116.49)
	Heterogeneous	$\bar{X}$	196.89	218.55
		δ	(137.35)	(152.53)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	30,820.24	1	1.75	NS
Social Class (C)	19,382.68	1	1.10	NS
AC	53,189.95	1	3.03	.10
Error	17,565.33	76		

C. Simple Effects Analysis

1. Social Class differences at each age grouping

Source	MS	df	F	p
Homogeneous Age	68,394.95	1	3.89	.10
Heterogeneous Age	4,177.69	1	<1	NS
Error	17,565.33	76		

2. Age differences at each social class grouping

Source	MS	df	F	p
Homogeneous Social Clan	82,493.70	1	4.69	.05
Heterogeneous Social Clan	1,516.49	1	<1	NS
Error	17,565.33	76		

Table 28

Analysis of Variance Summary Table for Timing Variable "Dramatic Play Alone" as a Function of Age and Social Class

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$ s	3.00 (10.875)	20.64 (43.65)
	Heterogeneous	$\bar{X}$ s	2.11 (9.177)	18.73 (41.66)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	35.0061	1	<1	ns
Social Class (C)	5005.3242	1	6.13	.05
AC	4.5770	1	<1	ns
Error	816.5403	76		

Table 29

Analysis of Variance Summary Table for Timing Variable "Dramatic Play with Others" as a Function of Age and Social Class

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\overline{X}$ s	4.46 (11.054)	25.77 (83.575)
	Heterogeneous	$\overline{X}$ s	32.57 (68.837)	50.18 (71.192)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	12281.1414	1	3.34	.10
Social Class (C)	6744.2701	1	1.84	NS
AC	60.9526	1	<1	NS
Error	3673.9355	76		

Table 30

Analysis of Variance Summary Table for "Cooperative Play" as a Function of Age and Social Class

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$ s	23.64 (34.239)	69.09 (101.981)
	Heterogeneous	$\bar{X}$ s	41.31 (74.297)	82.09 (94.899)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	4188.0976	1	<1	NS
Social Class (C)	33105.9506	1	5.73	.05
AC	97.1004	1	<1	NS
Error	5782.5692	76		

Table 31

Analysis of Variance Summary Table for "Parallel Play" as a Function of Age and Social Class

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$ σ	35.57 (82.289)	43.90 (115.491)
	Heterogeneous	$\bar{X}$ σ	6.94 (21.025)	.00 (.000)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	23,422.0359	1	3.78	.10
Social Class (C)	8.6019	1	<1	
AC	1,038.1669	1	<1	
Error	6,195.8898	76		

Table 32

Analysis of Variance Summary Table for "Intentional Physical Contact" as a Function of Age and Social Class

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$ s	28.14 (30.861)	18.00 (20.44)
	Heterogeneous	$\bar{X}$ s	13.78 (17.332)	45.54 (82.528)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	1471.5568	1	1.04	NS
Social Class (C)	3155.0438	1	2.22	NS
AC	6062.3642	1	4.27	.05
Error	1421.0964	76		

C. Simple Effects Analysis

1. Social Class differences at each age grouping

Source	MS	df	F	p
Homogeneous Age	780.1372	1	<1	NS
Heterogeneous Age	6753.7840	1	4.75	.05
Error	1421.0962	76		

Table 33

Analysis of Variance Summary Table for Involved-Looking as a Function of Age and Social Class

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$ s	103.21 (53.91)	75.91 (42.64)
	Heterogeneous	$\bar{X}$ s	101.16 (57.2)	44.55 (38.54)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	4,969.8377	1	1.98	NS
Social Class (C)	31,348.4976	1	12.51	.01
AC	3,824.9070	1	1.53	NS
Error	2,505.1288	76		

Table 34

Analysis of Variance Summary Table for "Time Alone" as a Function of Age and Social Class

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$ S	329.07 (183.9)	217.50 (115.44)
	Heterogeneous	$\bar{X}$ S	205.89 (111.41)	178.91 (122.94)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	116,515.9193	1	5.65	.05
Social Class (C)	85,467.7665	1	4.14	.05
AC	31,858.6479	1	1.54	NS
Error	20,625.1849	76		

Table 35

Analysis of Variance Summary Table for "Time with Others" as a Function of Age and Social Class

A. Table of Menas (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$ δ	758.82 (239.56)	913.36 (178.78)
	Heterogeneous	$\bar{X}$ δ	921.53 (132.20)	959.36 (144.17)

B. ANOV Summary

Source	MS	df	F	p
Age (A)	193,943.7604	1	5.37	.05
Social Class	164,764.6293	1	4.56	.05
AC	60,646.4566	1	1.68	NS
Error	36,095.2432	76		

Table 36 Observed Frequencies (Proportions) of 31 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) and Homogeneity (Homo) in Free Play Situations

l Categories

ituation: (free play)

	Variable No.	Age SES Homo Homo	Homo Hetero	Hetero Homo	Hetero Hetero	Total	x^2
arget to adult							
Dependency (neutral approach and maintaining)	6	23.00(.82)	13.00(.59)	16.00(.84)	5.00(.45)	57.00	8.34**
	17	11.00(.39)	11.00(.50)	13.00(.68)	4.00(.36)	39.00	4.64**
arget to peer	None						
arget to thing	None						
dult to target							
Nurturance (positive approach and maintaining)	12	17.00(.61)	13.00(.59)	16.00(.84)	10.00(.91)	56.00	6.51**
Intentional physical contact (positive approach and maintaining)	13	9.00(.32)	19.00(.50)	3.00(.16)	2.00(.18)	25.00	6.60**
Non-compliant	17	12.00(.43)	5.00(.23)	10.00(.53)	3.00(.27)	30.00	4.74**
Peer to target							
Dependency (neutral approach and maintaining)	6	11.00(.39)	11.00(.50)	6.00(.32)	1.00(.09)	29.00	5.60**
Affiliation (positive approach and maintaining)	9	19.00(.68)	20.00(.91)	14.00(.74)	4.00(.36)	57.00	10.90 *

x^2, $p > .25$ were not included in Tables 36 to 44.

Table 37 Observed Frequencies (Proportions) of 31 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) and Homogeneity (Homo) in Free Play Situations

31 Categories

Situation: (structured work)	Variable	Age Homo	Homo	Hetero	Hetero		
	No.	SES Homo	Hetero	Homo	Hetero	Total	x^2
Target to adult							
Assertion (positive maintaining)	20	12.00(.43)	14.00(.64)	5.00(.26)	8.00(.73)	39.00	8.70
Target to peer							
Directive influence (negative approach and maintaining)	3	5.00(.18)	11.00(.50)	6.00(.32)	3.00(.27)	25.00	6.02*
Target to thing	None						
Adult to target							
Non-directive influence (positive approach and maintaining)	11	6.00(.21)	9.00(.41)	4.00(.21)	6.00(.55)	25.00	5.91*
Peer to target							
Directive influence (negative approach and maintaining)	3	6.00(.21)	8.00(.36)	5.00(.26)	6.00(.55)	25.00	4.52*
Dependency (neutral approach and maintaining)	6	18.00(.64)	12.00(.55)	11.00(.58)	3.00(.27)	44.00	4.46*

* $p < .05$ *= 10.00
**$p < .10$ **= 8.50
*** $p < .25$ ***= 4.52

x^2, $p < .25$ were not included in Tables 36 to 44.

Table 38 Observed Frequencies (Proportions) of 31 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) and Homogeneity (Homo) in Free Play Situations

31 Categories

Situation: Pooled over situations

	Variable No.	Age SES Homo Homo	Homo Hetero	Hetero Homo	Hetero Hetero	Total	x^2	p
Target to adult								
Dependency (positive approach and maintaining)	8	13.00 (.46)	15.00 (.68)	9.00 (.47)	8.00 (.73)	45.00	4.19	
Directive influence (positive approach and maintaining)	10	4.00 (.14)	4.00 (.18)	8.00 (.42)	6.00 (.55)	22.00	9.48	**
Intentional physical contact (positive approach and maintaining)	13	7.00 (.25)	11.00 (.50)	5.00 (.26)	6.00 (.55)	29.00	5.74	**
Target to other								
Directive influence (negative approach and maintaining	3	10.00 (.36)	15.00 (.68)	7.00 (.37)	5.00 (.45)	37.00	6.19	**
Affiliation (positive approach and maintaining)	15	10.00 (.36)	4.00 (.18)	11.00 (.58)	2.00 (.18)	27.00	8.58	**
Target to thing								
Aimless (non-oriented)	31	15.00 (.54)	9.00 (.41)	9.00 (.47)	2.00 (.18)	35.00	4.19	
Adult to target								
Non-directive influence (positive approach and maintaining)	11	12.00 (.43)	16.00 (.73)	12.00 (.63)	8.00 (.73)	48.00	5.73	**
Intentional physical contact (positive approach and maintaining)	13	18.00 (.64)	17.00 (.77)	5.00 (.26)	6.00 (.55)	46.00	11.65	*
Passive compliance (positive maintaining)	19	8.00 (.29)	3.00 (.14)	7.00 (.37)	6.00 (.55)	24.00	6.41	**
Assertion (positive maintaining)	20	10.00 (.36)	5.00 (.16)	3.00 (.16)	6.00 (.55)	24.00	5.97	**
Other to target								
Unintentional physical contact (neutral approach and maintaining)	7	7.00 (.25)	11.00 (.50)	9.00 (.47)	3.00 (.27)	30.00	4.61	**
Affiliation (positive approach and maintaining)	15	7.00 (.25)	6.00 (.27)	11.00 (.58)	2.00 (.18)	26.00	7.61	**
Passive compliance (positive maintaining)	19	4.00 (.14)	10.00 (.45)	5.00 (.26)	3.00 (.27)	22.00	6.02	

*=10.00
**= 8.50
***= 4.52

Table 39 Observed Frequencies (Proportions) of 47 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) and Homogeneity (Homo) in Free Play Situations

47 Categories

Situation: (free play)

	Variable No.	Age SES: Homo Homo	Homo Hetero	Hetero Homo	Hetero Hetero	Total	x^2	p
Target to adult								
Non-compliant behavior (negative maintaining)	18	11.00(.39)	11.00(.50)	13.00(.68)	4.00(.36)	39.00	4.64	**
Dependency (neutral maintaining)	24	23.00(.82)	13.00(.59)	15.00(.79)	5.00(.45)	56.00	7.09	**
Target to peer								
Affiliation (positive approach)	9	16.00(.57)	16.00(.73)	6.00(.32)	5.00(.45)	43.00	7.38	**
Target to thing	none							
Adult to target								
Non-compliant behavior (negative maintaining)	18	12.00(.43)	5.00(.23)	10.00(.53)	3.00(.27)	30.00	4.74	**
Directive influence (positive maintaining)	29	12.00(.43)	14.00(.64)	13.00(.68)	8.00(.73)	47.00	4.76	**
Non-directive influence (positive maintaining)	30	7.00(.25)	10.00(.45)	6.00(.32)	6.00(.55)	29.00	4.11	
Nurturance (positive maintaining)	32	13.00(.46)	12.00(.55)	14.00(.74)	9.00(.82)	48.00	6.09	**
Other to target								
Affiliation (positive approach)	9	5.00(.18)	11.00(.50)	5.00(.26)	2.00(.18)	23.00	7.13	**
Dependency (neutral maintaining)	24	11.00(.39)	11.00(.50)	6.00(.32)	1.00(.09)	29.00	5.60	**
Affiliation (positive maintaining)	28	16.00(.57)	16.00(.73)	13.00(.68)	2.00(.18)	47.00	10.01	*

*=10.00
**= 8.50
***= 4.52

Table 40 Observed Frequencies (Proportions) of 47 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) and Homogeneity (Homo) in Free Play Situations

7 Categories

ituation: (structured work)

	Variable No.	Age SES: Homo Homo	Homo Hetero	Hetero Homo	Hetero Hetero	Total	χ^2
arget to adult							
Affiliation (positive approach)	9	16.00(.57)	17.00(.77)	9.00(.47)	8.00(.73)	50.00	4.72*
Assertion (positive maintaining)	33	12.00(.43)	14.00(.64)	5.00(.26)	8.00(.73)	39.00	8.70*
arget to peer							
Directive influence (negative maintaining)	22	3.00(.11)	11.00(.50)	5.00(.26)	3.00(.27)	22.00	9.56*
arget to thing	None						
dult to target							
Intentional physical contact (positive maintaining)	31	9.00(.32)	5.00(.23)	3.00(.16)	6.00(.55)	23.00	5.68*
Peer to target							
Affiliation (positive approach)	9	14.00(.50)	18.00(.82)	9.00(.47)	7.00(.64)	48.00	6.85*
Directive influence (negative maintaining)	22	5.00(.18)	7.00(.32)	4.00(.21)	6.00(.55)	22.00	5.94*
Dependency (neutral maintaining)	24	18.00(.64)	12.00(.55)	11.00(.58)	3.00(.27)	44.00	4.46

Table 41 Observed Frequencies (Proportions) of 47 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) and Homogeneity (Homo) in Free Play Situations

7 Categories

ituation: Pooled over situations

	Variable No.	Age SES: Homo Homo	Homo Hetero	Hetero Homo	Hetero Hetero	Total	x^2	p
arget to adult	none							
arget to peer								
Directive influence (negative maintaining)	22	7.00(.25)	14.00(.64)	7.00(.37)	5.00(.45)	33.00	7.83	**
Affiliation (mixed maintaining)	35	8.00(.29)	4.00(.18)	10.00(.53)	2.00(.18)	24.00	6.86	**
arget to thing								
Aimless (non-oriented)	47	15.00(.54)	9.00(.41)	9.00(.47)	2.00(.18)	35.00	4.19	**
Adult to target								
Directive influence (negative approach)	3	12.00(.43)	12.00(.55)	5.00(.26)	2.00(.18)	31.00	5.71	**
Directive influence (positive approach)	10	15.00(.54)	11.00(.50)	9.00(.47)	4.00(.36)	39.00	4.04	**
Non-directive influence (positive approach)	11	7.00(.25)	11.00(.50)	5.00(.26)	4.00(.36)	27.00	4.06	**
Passive compliance (positive maintaining)	27	8.00(.29)	3.00(.14)	7.00(.31)	6.00(.55)	24.00	6.41	**
Non-directive influence (pos-maintaining)	30	10.00(.36)	13.00(.59)	8.00(.42)	7.00(.64)	38.00	4.12	**
Intentional physical contact (positive maintaining)	31	17.00(.61)	14.00(.64)	4.00(.21)	6.00(.55)	41.00	9.34	**
Assertion (positive maintaining)	33	10.00(.36)	5.00(.23)	3.00(.16)	6.00(.55)	24.00	5.97	**
Directive influence (mixed maintaining)	36	16.00(.57)	9.00(.41)	3.00(.16)	6.00(.55)	34.00	8.68	**
Peer to target								
Affiliation (positive approach)	9	14.00(.50)	21.00(.95)	12.00(.63)	8.00(.73)	55.00	12.24	*
Directive influence (negative maintaining)	22	8.00(.29)	9.00(.41)	6.00(.32)	7.00(.64)	30.00	4.55	*
Passive compliance (positive maintaining)	27	4.00(.14)	10.00(.45)	5.00(.26)	3.00(.27)	22.00	6.02	*

Table 42 Observed Frequencies (Proportions) of 75 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) and Homogeneity (Homo) in Free Play Situations

5 Categories

ituation: (free play)

	Variable	Age Homo	Homo	Hetero	Hetero			
	No.	SES Homo	Hetero	Homo	Hetero	Total	x^2	p
arget to adult								
No response	16	10.00(.36)	8.00(.36)	13.00(.68)	4.00(.36)	35.00	6.17	**
Involved looking	47	21.00(.75)	13.00(.59	16.00(.84)	5.00(.45)	55.00	6.36	**
arget to peer								
Not applicable	14	6.00(.21)	13.00(.59)	9.00(.47)	2.00(.18)	30.00	10.00	*
Social participation	67	22.00(.79)	18.00(.82)	12.00(.63)	6.00(.55)	58.00	4.09	
arget to thing								
Goal directed alone	39	13.00(.45)	7.00(.30)	1.00(.15)	2.00(.18)	23.00	10.09	*
Group goal directed	40	9.00	9.00	2.00	2.00	22.00	5.51	**
Adult to target								
No response	16	11.00(.39)	5.00(.23)	10.00(.53)	3.00(.27)	29.00	4.44	
Intentional physical contact	45	9.00(.32)	11.00(.50)	3.00(.16)	2.00(.18)	25.00	6.60	**
Modeling	50	9.00(.32)	9.00(.41)	8.00(.42)	1.00(.09)	27.00	4.12	
Sharing	77	13.00(.46)	5.00(.23)	11.00(.58)	5.00(.45)	34.00	5.58	**
Peer to target								
Social participation	67	16.00(.57)	19.00(.86)	13.00(.68)	2.00(.18)	50.00	15.19	**

x^2. p > .25 were not included in Tables 36 to 44.

*p ≤ .01 *=10.00
**p ≤ .05 **= 8.50
***p ≤ .01 ***=4.52

Table 43 Observed Frequencies (Proportions) of 75 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) and Homogeneity (Homo) in Free Play Situations

75 Categories

Situation: (structured work)

	Variable No.	Age SES	Homo Homo	Homo Hetero	Hetero Homo	Hetero Hetero	Total	x^2	p
arget to adult									
Not applicable	14		14.00(.50)	13.00(.59)	9.00(.47)	10.00(.91)	46.00	6.49	**
Active acceptance	20		12.00(.43)	14.00(.64)	5.00(.26)	8.00(.73)	39.00	8.70	**
arget to peer									
Negative direction	91		5.00(.18)	12.00(.55)	6.00(.32)	3.00(.27)	26.00	7.75	**
arget to thing	none								
Adult to target									
Helping	41		3.00(.11)	10.00(.45)	5.00(.26)	4.00(.36)	22.00	7.96	**
Suggestion	81		6.00(.21)	9.00(.41)	4.00(.21)	5.00(.45)	24.00	4.20	
Peer to target									
Negative direction	91		6.00(.21)	8.00(.36)	5.00(.26)	6.00(.55)	25.00	4.52	**

x^2. $p > .25$ were not included in Tables 36 to 44.

*	$p \leq .01$	*=10.00
**	$p \leq .05$	**= 8.50
***	$p \leq .01$	***= 4.52

Table 44 Observed Frequencies (Proportions) of 75 Grouped Categories and Chi Squares of Differences Between Four Environments Varying on Two Dimensions of Age and SES

Socioeconomic Status (SES) Heterogeneity (Hetero) Homogeneity (Homo) in Free Play Situations

75 Categories

Situation: Pooled over situations

	Variable No.	Age SES Homo Homo	Homo Hetero	Hetero Homo	Hetero Hetero	Total	x^2	p
Target to adult								
Intentional physical contact	45	7.00(.25)	11.00(.50)	5.00(.26)	6.00(.55)	29.00	5.74	***
Showing	78	5.00(.18)	10.00(.45)	5.00(.26)	6.00(.55)	26.00	7.19	***
Positive direction	90	4.00(.14)	4.00(.18)	8.00(.42)	6.00(.55)	22.00	9.48	**
Target to peer								
Playful contact	64	10.00(.36)	2.00(.09)	10.00(.53)	2.00(.18)	24.00	10.38	*
Showing	78	3.00(.11)	8.00(.36)	6.00(.32)	5.00(.45)	22.00	6.76	***
Negative direction	91	10.00(.36)	15.00(.68)	7.00(.37)	5.00(.45)	37.00	6.19	***
Target to thing								
Group goal directed	40	10.00(.36)	9.00(.41)	2.00(.11)	2.00(.18)	23.00	5.93	***
Non-involved	56	9.00(.32)	6.00(.27)	9.00(.47)	1.00(.09)	25.00	4.98	***
Adult to target								
Active acceptance	20	10.00(.36)	5.00(.23)	3.00(.16)	6.00(.55)	24.00	5.97	***
Compliance	25	8.00(.29)	3.00(.14)	7.00(.37)	6.00(.55)	24.00	6.41	***
Intentional physical contact	45	18.00(.64)	17.00(.77)	5.00(.26)	6.00(.55)	46.00	11.65	*
Suggestion	81	12.00(.43)	16.00(.73)	12.00(.63)	8.00(.73)	48.00	5.73	***
Peer to target								
Unscored	15	11.00(.39)	13.00(.59)	7.00(.37)	2.00(.18)	33.00	5.50	***
Compliance	25	4.00(.14)	10.00(.45)	5.00(.26)	3.00(.27)	22.00	6.02	**
Imitation	43	13.00(.46)	14.00(.64)	9.00(.47)	1.00(.69)	37.00	8.79	**
Involved looking	47	18.00(.64)	14.00(.64)	9.00(.47)	3.00(.27)	44.00	5.50	**
Playful contact	64	7.00(.25)	6.00(.27)	10.00(.53)	1.00(.09)	24.00	7.34	**
Unintentional physical contact	87	7.00(.25)	11.00(.50)	9.00(.47)	3.00(.27)	30.00	4.61	**

* $p < .01$ * = 10.00
** $p < .05$ ** = 8.50
*** $p < .01$ *** = 4.52

x^2, p .25 were not included in Tables 36 to 44.

Table 45

Summary of Significant Differences of Teacher Functioning in the four Environments on Each of 20 Rating Scales

Variable	Age Main Effect	Social Class Main Effect	Interaction
1. Verbal Interaction	-	.05	-
2. Educational Activities	-	-	-
3. Individual vs Group Goals	-	.10	-
4. Approach to Learning	-	-	-
5. Use of Time - Custodial	.01	.01	.01
6. Amount of Control	-	.01	.05
7. Control of Material - Choice	-	.05	-
8. Sensitivity	-	.01	-
9. Responsiveness	-	.01	-
0. Praise and Approval	-	.01	-
1. Expressed Affection	-	.01	-
2. Criticism and Disapproval	-	.05	-
3. Intrusiveness	.05	.01	-
4. Use of Time - Inactive	.05	-	-
5. Distinction Between Work and Play	.01	-	-
6. Facilitation	.05	-	-

Note: This table notes significance levels for the Age and Social Class main effects, and the interaction of these variables. Subsequent tables give complete ANOV summary tables for all variables for which significance was found.

Table 46

Analysis of Variance Summary Table for Teacher Variable "Verbal Interaction" (1)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\overline{X}$	4.50000	5.50000
		s		
	Heterogeneous	$\overline{X}$	3.00000	5.66667
		s		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	2.6667	1	.9909	NS
Social Class (C)	20.1667	1	7.492	.01
AC	4.1667	1	1.574	NS
Error	2.6917	20		

Table 47

Analysis of Variance Summary Table for Teacher Variable "Use of Time - Educational Activities (2)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	3.50000	7.00000
		σ		
	Heterogeneous	$\bar{X}$	3.83333	6.00000
		σ		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	.6667	1	.4880	NS
Social Class (C)	48.1667	1	35.2430	.01
AC	2.6667	1	1.9511	NS
Error	1.3667	20		

Table 48

Analysis of Variance Summary Table for Teacher Variable "Individual vs Group Goals"*(3)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	4.08333	6.00000
		δ		
	Heterogeneous	$\bar{X}$	5.0000	5.50000
		δ		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	.2604	1	.1248	NS
Social Class (C)	8.7604	1	4.2008	.10
AC	3.0104	1	1.443	NS
Error	2.0854	20		

* HIGH SCORE-INDICATES THAT "INDIVIDUAL SCORE" IS HIGH

Table 49

Analysis of Variance Summary Table for Teacher Variable "Use of Time - Custodial" (5)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	6.08333	4.08333
		σ		
	Heterogeneous	$\bar{X}$	5.75000	5.58333
		σ		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	2.0417	1	4.0834	NS
Social Class (C)	7.0417	1	14.0834	.01
AC	5.0417	1	10.0834	.01
Error	.5000	20		

C. Simple Effects Analysis

1. Effects of Social Class at Each Age

Source	MS	df	F	p
Homogeneous Age	12.0000	1	24.00	.01
Heterogeneous Age	.0906	1	1	
Error	.5000	20		

2. Effects of Age at Each Social Class

Source	MS	df	F	p
Homogeneous Social Class	.3408	1	1	
Heterogeneous Social Class	6.7506	1	13.50	.01
Error	.5000	20		

Table 50

Analysis of Variance Summary Table for Teacher Variable "Amount of Control" *(6)

A. **Table of Means (Standard Deviations given in parentheses)**

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\overline{X}$	3.25000	6.25000
		s		
	Heterogeneous	$\overline{X}$	3.83333	4.41667
		s		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	2.3438	1	1.1634	NS
Social Class (C)	19.2604	1	9.5604	.01
AC	8.7604	1	4.3484	.05
Error	2.0146	20		

* HIGH SCORE=LOW RATING ON THE VARIABLE

Table 51

Analysis of Variance Summary Table for Teacher Variable "Control of Material Choice"* (7)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	4.91667	4.50000
		s		
	Heterogeneous	$\bar{X}$	5.16667	3.50000
		s		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	.8438	1	.6240	NS
Social Class (C)	6.5104	1	4.8150	.05
AC	2.3437	1	1.7337	NS
Error	1.3521	20		

* HIGH SCORE=CHILD CONTROLS

Table 52

Analysis of Variance Summary Table for Teacher Variable "Sensitivity" (8)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	4.25000	7.00000
		s		
	Heterogeneous	$\bar{X}$	4.0000	6.83333
		s		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	.2504	1	.160	NS
Social Class (C)	46.7504	1	32.018	.01
AC	.0104	1	.691	NS
Error	1.4604	20		

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Table 53

Analysis of Variance Summary Table for Teacher Variable "Responsiveness" (9)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	4.16750	6.25000
		s		
	Heterogeneous	$\bar{X}$	4.33333	6.83333
		s		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	.8419	1	.2574	NS
Social Class (C)	31.4990	1	9.6424	.01
AC	.2615	1	.0800	NS
Error	3.2667	20		

Table 54

Analysis of Variance Summary Table for Teacher Variable "Praise and Approval"* (10)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	6.33333	3.08333
		σ		
	Heterogeneous	$\bar{X}$	5.25000	3.00000
		σ		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	2.0417	1	.8893	NS
Social Class (C)	45.3750	1	19.7643	.01
AC	1.5000	1	:6533	NS
Error	2.2958	20		

*HIGH SCORE=LOW PRAISE AND APPROVAL

Table 55

Analysis of Variance Summary Table for Teacher Variable "Expressed Affection" (11)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	4.66667	7.25000
		s		
	Heterogeneous	$\bar{X}$	4.83333	6.6667
		s		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	.2604	1	.4177	NS
Social Class (C)	29.2604	1	12.2239	.01
AC	.8437	1	.3524	NS
Error	2.3937	20		

Table 56

Analysis of Variance Summary Table for Teacher Variable "Criticism and Disapproval" (12)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\overline{X}$	4.66667	3.41667
		σ		
	Heterogeneous	$\overline{X}$	5.08333	3.58333
		σ		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	.5104	1	.3097	NS
Social Class (C)	11.3437	1	6.8837	.05
AC	.0937	1	.0568	NS
Error	1.6479	20		

Table 57

Analysis of Variance Summary Table for Teacher Variable "Use of Time - Inactive"* (14)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\overline{X}$	2.91667	1.91667
		δ		
	Heterogeneous	$\overline{X}$	3.91667	3.16667
		δ		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	7.5938	1	4.6791	.05
Social Class (C)	4.5938	1	2.830	NS
AC	.0938	1	.0577	NS
Error	1.6229	20		

---

* HIGH SCORE

Table 58

Analysis of Variance Summary Table for Teacher Variable "Distinction Between Work and Play" (15)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	5.33333	6.58333
		δ		
	Heterogeneous	$\bar{X}$	4.3333	4.0000
		δ		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	19.2604	1	16.8424	.01
Social Class (C)	1.2604	1	1.1023	NS
AC	3.7604	1	3.2879	NS
Error	1.1437	20		

Table 59

Analysis of Variance Summary Table for Teacher Variable "Facilitation" (16)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\bar{X}$	4.91667	7.66667
		s		
	Heterogeneous	$\bar{X}$	5.16667	6.08333
		s		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	2.6667	1	.1573	NS
Social Class (C)	20.1667	1	4.8839	.05
AC	5.0417	1	1.220	NS
Error	4.1292	20		

Table-60

Analysis of Variance Summary Table for Teacher Variable "Intrusiveness"(13)

A. Table of Means (Standard Deviations given in parentheses)

			Social Class	
			Homogeneous	Heterogeneous
Age	Homogeneous	$\overline{X}$	5.33333	3.08333
		δ		
	Heterogeneous	$\overline{X}$	6.58333	4.41667
		δ		

B. ANOV Summary

Source	MS	df	F	p
Age (A)	10.0104	1	5.9838	.05
Social Class (C)	29.2604	1	17.4908	.01
AC	.0104	1	.0062	NS
Error	1.6729	20		

Table 61

Adjusted change scores of overall positive affect during the Trust situation over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

Group 1 (N = 6)	Group 2 (N = 2)	Group 3 (N 4)
+.02	-.01	-.02

ANOV Summary

Source	df	SS	MS	F
Group	2	2719.6099	1359.8050	.3207
Error	32	38156.4014	4239.6002	

Table 62

Adjusted change scores of overall combined affect during the Trust situation for five different tasks over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

Group 1 (N = 6)	Group 2 (N = 2)	Group 3 (N = 4)
+.01	-.02	-.01

ANOV Summary

Source	df	SS	MS	F
Group	2	1881.5817	940.7909	.1888
Error	3	44857.3023	4984.1447	

Table 63

Adjusted change scores of positive affect during stress tasks with experimenter for five different tasks over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

Group 1 (N = 6)	Group 2 (N = 2)	Group 3 (N = 4)
+.08	-.04	+.08

ANOV Summary

Source	df	SS	MS	F
Group	2	4958.2885	2479.1443	1.2355
Error	9	18059.5469	2006.6163	

Table 64

Adjusted change scores of negative affect during stress tasks with experimenter during the Trust situation over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

Group 1 (N = 6)	Group 2 (N = 2)	Group 3 (N = 4)
+.05	+.02	-.02

ANOV Summary

Source	df	SS	MS	F
Group	2	20.2808	10.1404	.1894
Error	9	481.9739	53.5527	

Table 65

Adjusted change scores of combined affect during stress tasks with experimenter during the Trust situation over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

Group 1 (N = 6)	Group 2 (N = 2)	Group 3 (N = 4)
+.02	-.03	+.01

ANOV Summary

Source	df	SS	MS	F
Group	2	4089.2698	2044.6349	.8001
Error	9	22999.8951	2555.5439	

Table 66

Adjusted change scores of overall resistance rating during the Trust situation over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

Group 1 (N = 6)	Group 2 (N = 2)	Group 3 (N = 4)
+.05	+.04	-.09

ANOV Summary

Source	df	SS	MS	F
Group	2	378.2490	189.1245	.0136
Error	9	124790.3455	13865.5939	

Table 67

Adjusted change scores of refusal of toy given to child by experimenter during the Trust situation over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

Group 1 (N = 6)	Group 2 (N = 1)	Group 3 (N = 3)
-.01	_	+.02

ANOV Summary

Source	df	SS	MS	F
Group	1	2343.75	2343.75	.8889
Error	8	21093.75	2636.7188	

Table 68

Adjusted change scores of overall positive affect during the Trust situation over a 12-month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.01 (N = 11)	-.03 (N = 10)
	Heterogeneous	+.05 (N = 5)	+.05 (N = 4)

ANOV Summary

Source	df	SS	F	
Age	1	32085.9453	11.3464	$p < .003$
Social Class	1	300.2257	.1062	$p < .75$
Age X Social Class	1	486.2816	.6844	$p < .68$
Error	26	73523.8916		

Table 69

Adjusted change scores of overall negative affect during the Trust situation over a 12-month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.07 (N = 11)	-.07 (N = 10)
	Heterogeneous	+.05 (N = 5)	-.07 (N = 4)

ANOV Summary

Source	df	SS	F	
Age	1	8.0647	.026	$p < .87$
Social Class	1	1118.5425	3.6095	$p < .07$
Age X Social Class	1	5.1654	.0167	$p < .89$
Error	26	8057.1062		

Table 70

Adjusted change scores of overall combined affect during the Trust situation over a 12-month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.02 (N = 11)	-.02 (N = 10)
	Heterogeneous	+.04 (N = 5)	+.06 (N = 4)

ANOV Summary

Source	df	SS	F	
Age	1	32280.7564	7.4026	$p < .01$
Social Class	1	296.4440	.0680	$p < .79$
Age X Social Class	1	132.0504	.0303	$p < .86$
Error	26	113379.5794		

Table 71

Adjusted change scores of overall body tension during experimenter tasks during the Trust situation over a 12-month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.05 (N = 11)	-.02 (N = 10)
	Heterogeneous	-.02 (N = 5)	-.04 (N = 4)

ANOV Summary

Source	df	SS	F	
Age	1	9360.6752	.9692	$p < .66$
Social Class	1	11575.0999	1.1985	$p < .28$
Age X Social Class	1	4474.7778	.4633	$p < .51$
Error	26	251110.7026		

Table 72

Adjusted change scores of overall uncooperativeness during the Trust situation over a 12-month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.05 (N = 11)	-.04 (N = 10)
	Heterogeneous	+.04 (N = 5)	-.08 (N = 4)

ANOV Summary

Source	df	SS	F	
Age	1	3897.5134	.2940	$p < .60$
Social Class	1	68333.3843	5.1539	$p < .03$
Age X Social Class	1	683.4001	.0515	$p < .82$
Error	26	344721.3190		

Table 73

Adjusted change scores of overall positive affect during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/heterogeneous social class (3) heterogeneous age/heterogeneous social class

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.04	-.01	+.05

ANOV Summary

Source	df	SS	MS	F	
Group	2	20152.3015	10076.1508	2.2863	p = .1163
Error	32	141028.6195	4407.1444		

Table 74

Adjusted change scores of overall negative affect during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/heterogeneous social class (3) heterogeneous age/heterogeneous social class

Group 1	Group 2	Group 3
(N = 22)	(N = 9)	(N = 4)
+.01	-.05	-.07

ANOV Summary

Source	df	SS	MS	F
Group	2	292.4547	156.2274	.3758
Error	32	12452.9057	389.1533	

Table 75

Adjusted change scores of overall combined affect during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/heterogeneous social class (3) heterogeneous age/heterogeneous social class

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.04	-.02	+.06

ANOV Summary

Source	df	SS	MS	F	
Group	2	28714.0515	14357.0258	2.6485	p = .0846
Error	32	173468.4017	5420.8876		

Post-hoc tests

Duncan Range:

Group 1 vs Group 3 $p < .05$

Table 76

Adjusted change scores of positive affect during introduction during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of gorup composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/heterogeneous social class (3) heterogeneous age/heterogeneous social class

Group 1	Group 2	Group 3
(N = 22)	(N = 9)	(N = 4)
-.01	+.06	+.05

ANOV Summary

Source	df	SS	MS	F
Group	2	15037.8446	7518.9223	1.2333
Error	32	195083.3969	6096.3874	

Table 77

Adjusted change scores of combined affect during introduction during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/heterogeneous social class (3) heterogeneous age/heterogeneous social class

Group 1	Group 2	Group 3
(N = 22)	(N = 9)	(N = 4)
-.01	+.07	+.05

ANOV Summary

Source	df	SS	MS	F
Group	2	15183.8975	7591.9488	1.0321
Error	32	235388.5171	7355.8912	

Table 78

Adjusted change scores of positive affect during tasks with experimenter during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/heterogeneous social class (3) heterogeneous age/heterogeneous social class

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.06	-.01	+.06

ANOV Summary

Source	df	SS	MS	F	
Group	2	22229.2887	11114.6443	2.3118	p = .1137
Error	32	153851.0367	4807.8449		

Table 79

Adjusted change scores of negative affect during tasks with experimenter during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/heterogeneous social class (3) heterogeneous age/heterogeneous social class

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
+.03	-.02	-.01

ANOV Summary

Source	df	SS	MS	F
Group	2	934.9710	467.4855	.4884
Error	32	30631.1228	957.2226	

Table 80

Adjusted change scores of combined affect during tasks with experimenter during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/heterogeneous social class (3) heterogeneous age/heterogeneous social class

Group 1	Group 2	Group 3
(N = 22)	(N = 9)	(N = 4)
-.06	-.01	+.07

ANOV Summary

Source	df	SS	MS	F	
Group	2	36355.1985	18177.5993	2.5985	p = .0883
Error	32	223853.3053	6995.4185		

Post-hoc tests

Duncan Range:

Group 1 vs Group 3 $p < .05$

Table 81

Adjusted change scores of positive affect during blindfold, boardwalk and chair jump with experimenter during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.07	-.01	+.07

ANOV Summary

Source	df	SS	MS	F	
Group	2	30660.6322	15330.3161	3.1618	p .05
Error	32	155153.9989	4848.5625		

Post-hoc tests

Difference between groups 1 and 3 $p < .05$
(Duncan)

Table 82

Adjusted change scores of negative affect during blindfold, boardwalk, and chair jump with E during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
+.04	-.04	-.01

ANOV Summary

Source	df	SS	MS	F
Group	2	1078.8714	539.4357	.3439
Error	32	50200.4261	1568.7633	

Table 83

Adjusted change scores of combined affect during blindfold, boardwalk, and chair jump with E during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1	Group 2	Group 3
(N = 22)	(N = 9)	(N = 4)
-.08	-.02	+.08

ANOV Summary

Source	df	SS	MS	F	
Group	2	46269.2505	23134.6252	2.9048	$p < .10$
Error	32	254856.5037	7964.2657		

Post-hoc tests

Difference between group 1 and group 3 $p < .05$

Table 84

Adjusted change scores of positive affect during blindfold, boardwalk, and chair jump with CG during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogenoeus age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.02	-.02	+.05

ANOV Summary

Source	df	SS	MS	F
Group	2	17972.8043	8986.4021	1.3673
Error	32	210318.9141	6572.4661	

Table 85

Adjusted change scores of negative affect during blindfold, boardwalk, and chair jump with CG during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.03	+.08	-.02

ANOV Summary

Source	df	SS	MS	F
Group	2	551.8310	275.9155	.9928
Error	32	8893.4624	277.9207	

Table 86

Adjusted change scores of combined affect during blindfold, boardwalk, and chair jump with CG during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
+.05	-.03	+.05

ANOV Summary

Source	df	SS	MS	F
Group	2	25769.4574	12884.7287	1.7272
Error	32	238720.6885	7460.0215	

Table 87

Adjusted change scores of body tension during introduction during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
+.02	-.04	-.04

ANOV Summary

Source	df	SS	MS	F
Group	2	20327.7108	10163.85[illegible]	1.3837
Error	32	235056.0450	7345.5014	

Table 88

Adjusted change scores of body tension during experimenter tasks during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
+.02	-.03	-.04

ANOV Summary

Source	df	SS	MS	F
Group	2	18461.8301	9230.9151	1.9845
Error	32	148845.2007	4651.4125	

Table 89

Adjusted change scores of body tension during blindfold, boardwalk, and chair jump with E during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1	Group 2	Group 3
(N = 22)	(N = 9)	(N = 4)
+.02	-.04	-.05

ANOV Summary

Source	df	SS	MS	F	
Group	2	23570.6064	11785.3032	2.4028	$p < .10$
Error	32	156953.3640	4904.7926		

Post-hoc tests

Difference between groups 1 and 2 $p < .05$

Table 90

Adjusted change scores of body tension during blindfold, boardwalk, and chair jump with CG during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
+.09	-.01	-.01

ANOV Summary

Source	df	SS	MS	F
Group	2	3074.4787	1537.2394	.5620
Error	32	87525.9001	2735.1844	

Table 91

Adjusted change scores of resistance during experimenter tasks during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.03	+.01	-.05

ANOV Summary

Source	df	SS	MS	F
Group	2	1081.1338	540.5669	.9498
Error	32	335597.2806	10487.4150	

Table 92

Adjusted change scores of resistance during blindfold, boardwalk, and chair jump with experimenter during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.01	+.01	+.04

ANOV Summary

Source	df	SS	MS	F
Group	2	8084.1299	4042.0650	.4212
Error	32	307104.9812	9597.0307	

Table 93

Adjusted change scores of resistance during blindfold, boardwalk, and chair jump with CG during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
-.01	+.03	-.04

ANOV Summary

Source	df	SS	MS	F
Group	2	6155.6211	3077.8105	.5595
Error	32	176022.7152	5500.7098	

Table 94

Adjusted change scores of response to go to new room during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
+.03	-.05	-.05

ANOV Summary

Source	df	SS	MS	F
Group	2	28797.7536	14398.8768	.8888
Error	32	518390.2192	16199.6944	

Table 95

Adjusted change scores of response to invitation to hold E's hand during the Trust situation over a 12-month period in children 36-48 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/heterogeneous social class.

Group 1 (N = 22)	Group 2 (N = 9)	Group 3 (N = 4)
+.01	-.03	-.07

ANOV Summary

Source	df	SS	MS	F
Group	2	27538.9362	13769.4681	.4912
Error	32	897080.4721	28033.7648	

Table 96

Adjusted change scores of persistence (continues task) for five different tasks over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1	Group 2	Group 3
Task 1	-.04 (N = 7)	+.02 (N = 2)	-.03 (N = 3)
Task 2	+.08 (N = 7)	-.06 (N = 2)	-.09 (N = 5)
Task 3	+.02 (N = 6)	- (N = 1)	-.03 (N = 4)
Task 4	-.10 (N = 6)	-.10 (N = 2)	+.02 (N = 4)
Task 5	+.01 (N = 5)	+.05 (N = 2)	-.03 (N = 6)

ANOV Summary

Source	df	SS	MS	F	
Task 1:					
Group	2	895.0426	447.5213	1.0678	
Error	9	3771.8653	419.0961		
Task 2:					
Group	2	597.5002	298.7501	.2256	
Error	11	14569.1840	1324.4713		
Task 3:					
Group	1	4461.3677	4461.3677	1.8350	
Error	8	19450.4003	2431.3000		
Task 4:					
Group	2	1907.2165	953.6082	.0846	
Error	9	101495.9779	11277.3309		
Task 5:					
Group	2	10600.8624	5300.4312	3.4489	$p < .10$
Error	10	15368.3154	1536.8315		

Table 97

Adjusted change scores of persistence (time on experimenter's goal) for five different tasks over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1	Group 2	Group 3
Task 1	-.01 (N = 7)	+.05 (N = 2)	-.03 (N = 3)
Task 2	+.02 (N = 7)	-.03 (N = 2)	-.02 (N = 5)
Task 3	+.01 (N = 6)	- (N = 1)	-.02 (N = 4)
Task 4	-.01 (N = 6)	+.02 (N = 2)	-.09 (N = 4)
Task 5	+.01 (N = 5)	+.06 (N = 2)	-.03 (N = 6)

ANOV Summary

Source	df	SS	MS	F	
Task 1:					
Group	2	6289.0104	3144.5052	2.1234	
Error	[illegible]	13327.6566	1480.8507		
Task 2:					
Group	2	6228.8056	3114.4028	1.6367	
Error	11	20931.0524	1902.8229		
Task 3:					
Group	1	2087.3612	2087.3612	1.0103	
Error	8	16529.0980	2066.1372		
Task 4:					
Group	2	1651.8371	825.9186	.2323	
Error	9	32000.1017	3555.5669		
Task 5:					
Group	2	14042.9134	7021.4567	3.0552	$p < .10$
Error	10	22982.0148	2298.2015		

Post-hoc tests: No significant differences

Table 98

Adjusted change scores of persistence (time on child's goal) for five different tasks over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1	Group 2	Group 3
Task 1	+.08 (N = 7)	-.03 (N = 2)	-.02 (N = 3)
Task 2	-.01 (N = 7)	+.03 (N = 2)	+.01 (N = 5)
Task 3	+.01 (N = 6)	- (N = 1)	-.02 (N = 4)
Task 4	-.02 (N = 6)	-.04 (N = 2)	+.04 (N = 4)
Task 5	-.03 (N = 5)	-.01 (N = 2)	+.04 (N = 6)

ANOV Summary

Source	df	SS	MS	F
Task 1:				
Group	2	2074.1005	1037.0502	1.4437
Error	9	6465.0044	718.3338	
Task 2:				
Group	2	2945.3907	1472.6953	.5429
Error	11	29837.8346	2712.5304	
Task 3:				
Group	1	2714.0352	2714.0352	1.2751
Error	8	17027.2467	2128.4058	
Task 4:				
Group	2	11958.5442	5979.2721	2.4400
Error	9	22054.8361	2450.5373	
Task 5:				
Group	2	515.9820	257.9910	.4188
Error	10	6159.5186	615.9519	

Table 99

Adjusted change scores of persistence (ETCT) for five different tasks over a 12-month period in children 12-24 months of age attending day care centers with three types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1	Group 2	Group 3
Task 1	-.01 (N = 7)	+.05 (N = 2)	-.08 (N = 3)
Task 2	+.03 (N = 7)	-.03 (N = 2)	-.02 (N = 6)
Task 3	-.01 (N = 6)	- (N = 1)	+.02 (N = 11)
Task 4	+.02 (N = 6)	+.03 (N = 2)	-.03 (N = 5)
Task 5	+.01 (N = 5)	+.03 (N = 2)	-.02 (N = 6)

ANOV Summary

Source	df	SS	MS	F
Task 1:				
Group	2	7101.2530	3550.6265	2.5947
Error	9	12315.5239	1368.3915	
Task 2:				
Group	2	6803.6321	3401.8161	1.5391
Error	12	26522.9424	2210.2452	
Task 3:				
Group	1	1555.4023	1555.4023	.6825
Error	8	18232.9664	2279.1208	
Task 4:				
Group	2	7269.1050	3634.5525	1.8557
Error	10	19585.4330	1958.5433	
Task 5:				
Group	2	5392.0179	2696.0090	1.4049
Error	10	19189.4188	1918.9419	

Table 100

Adjusted change scores of persistence (Intensity while continuing) for five different tasks over a twelve month period in children 12-24 months of age attending day care centers with three types of eem group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1 (N-)	Group 2 (N-)	Group 3 (N-)
Task 1	.05 (N=7)	.09 (N=2)	-.01 (N=3)
Task 2	.02 (N=7)	-.08 (N=6)	-.03 (N=6)
Task 3	.01 (N=6)	-	.02 (N=4)
Task 4	-.07 (N=6)	.07 (N=2)	.08 (N=5)
Task 5	-.03 (N=5)	-.09 (N=2)	.05 (N=6)

ANOV Summary

Source	df	ee SS	MS	F
Task 1:				
Group	2	465.1940	232.5970	.4957
Error	9	4222.9733	469.2193	
Task 2:				
Group	2	57.1646	28.5823	.0468
Error	12	7322.0591	610.1716	
Task 3:				
Group	1	1562.0589	1562.0589	1.8337
Error	8	6814.7522	851.8440	
Task 4:				
Group	2	391.8041	195.9021	.0492
Error	10	39842.6916	3984.2692	
Task 5:				
Group	2	325.2000	162.6000	2.8755
Error	10	565.4625	56.5463	

Table 101

Adjusted change scores of persistence (Emotional Dependency) for five different tasks over a twelve month period in children 12-24 months of age attending day care centers with three types of eem group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1 (N-)	Group 2 (N-)	Group 3 (N-)
Task 1	.03 (N=7)	.02 (N=2)	-.08 (N=3)
Task 2	.02 (N=7)	.02 (N=2)	-.03 (N=5)
Task 3	.05 (N=6)	-	-.08 (N=4)
Task 4	.04 (N=6)	-.02 (N=2)	.05 (N=4)
Task 5	.01 (N=5)	.06 (N=2)	-.03 (N=6)

ANOV Summary

Source	df	ee SS	MS	F
Task 1:				
Group	2	171.8447	85.9224	1.1455
Error	9	675.0743	75.0083	
Task 2:				
Group	2	35.0333	17.5166	.3075
Error	11	626.3393	56.9399	
Task 3:				
Group	1	360.7628	360.7628	5.6879
Error	8	507.4073	63.4259	
Task 4:				
Group	2	13.9272	6.9636	.0713
Error	9	878.9614	97.6624	
Task 5:				
Group	2	125.1501	62.5751	.1809
Error	10	3458.6435	345.8644	

Table 102

Adjusted change scores of persistence (Instrumental Dependency) for five different tasks over a twelve month period in children 12-24 months of age attending day care centers with three types of eem group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1 (N-)	Group 2 (N-)	Group 3 (N-)
Task 1	.07 (N=7)	-.02 (N=2)	-.05 (N=3)
Task 2	.02 (N=7)	.05 (N=2)	.00 (N=5)
Task 3	.00 (N=6)	-	.00 (N=4)
Task 4	.04 (N=6)	.03 (N=2)	-.02 (N=4)
Task 5	.04 (N=5)	-.05 (N=2)	-.02 (N=6)

ANOV Summary

Source	df	ee SS	MS	F
Task 1:				
Group	2	6.9744	3.4872	1.1979
Error	9	26.1996	2.9111	
Task 2:				
Group	2	44.7942	22.3971	1.0145
Error	11	242.8571	22.0779	
Task 3:				
Group	1	.0000	.0000	.0000
Error	8	.0000	.0000	
Task 4:				
Group	2	34.9626	17.4813	1.4105
Error	9	111.5447	12.3939	
Task 5:				
Group	2	122.7468	61.3734	.4353
Error	10	1409.9236	140.9924	

Table 103

Adjusted change scores of persistence (Physical & Psychological Interruption) for five different tasks over a twelve month period in children 12-24 months of age attending day care centers with three types of eem group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1 (N-)	Group 2 (N-)	Group 3 (N-)
Task 1	-.02 (N=7)	-.03 (N=2)	.05 (N=3)
Task 2	-.02 (N=7)	.02 (N=2)	.03 (N=5)
Task 3	-.04 (N=6)	-	.06 (N=4)
Task 4	-.09 (N=6)	-.06 (N=2)	.05 (N=4)
Task 5	-.03 (N=5)	-.09 (N=2)	.05 (N=6)

ANOV Summary

Source	df	ee SS	MS	F
Task 1:				
Group	2	96.7878	48.3939	1.4634
Error	9	297.6248	33.0694	
Task 2:				
Group	2	45.1900	22.5950	.7863
Error	11	316.0942	28.7358	
Task 3:				
Group	1	246.6454	246.6454	1.5872
Error	8	1243.1676	155.3959	
Task 4:				
Group	2	171.4648	85.7324	.3160
Error	9	587.1380	65.2376	
Task 5:				
Group	2	325.2000	162.6000	2.8755
Error	10	565.4625	56.5463	

Table 104

Adjusted change scores of persistence (Glances) for five different tasks over a twelve month period in children 12-24 months of age attending day care centers with three types of eem group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1 (N-)	Group 2 (N-)	Group 3 (N-)
Task 1	-.06 (N=7)	-.06 (N=2)	.05 (N=3)
Task 2	.02 (N=7)	-.02 (N=2)	.02 (N=5)
Task 3	-.06 (N=6)	-	.02 (N=4)
Task 4	-.03 (N=6)	.04 (N=2)	.02 (N=4)
Task 5	-.05 (N=5)	.01 (N=2)	-.02 (N=6)

ANOV Summary

Source	df	ee SS	MS	F
Task 1:				
Group	2	171.8447	85.9224	1.1455
Error	9	675.0743	75.0083	
Task 2:				
Group	2	37.4128	18.7064	.2361
Error	11	871.4686	79.2244	
Task 3:				
Group	1	38.1317	38.1317	.1073
Error	8	2842.7192	355.3399	
Task 4:				
Group	2	74.0050	37.0025	.1183
Error	9	2813.9079	312.6564	
Task 5:				
Group	2	498.5496	249.2748	1.2272
Error	10	2031.2296	203.1230	

Table 105

Adjusted change scores of persistence (Affect) for five different tasks over a twelve month period in children 12-24 months of age attending day care centers with three types of eem group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1 (N-)	Group 2 (N-)	Group 3 (N-)
Task 1	+.09 (N=7)	+.02 (N=2)	-.03 (N=3)
Task 2	+.08 (N=7)	-.02 (N=2)	-.01 (N=5)
Task 3	+.05 (N=6)	- (N=1)	-.07 (N=4)
Task 4	-.01 (N=6)	-.01 (N=2)	+.09 (N=4)
Task 5	+.01 (N=5)	-.06 (N=2)	-.08 (N=6)

ANOV Summary

Source	df	ee SS	MS	F
Task 1:				
Group	2	42.0883	21.0442	.1245
Error	9	1521.1855	169.0206	
Task 2:				
Group	2	563.8449	281.9225	.2862
Error	11	10835.7927	985.0721	
Task 3:				
Group	1	3.2597	3.2597	.0031
Error	8	8448.3166	1056.0396	
Task 4:				
Group	2	927.2593	463.6297	.3217
Error	9	12970.3925	1441.1547	
Task 5:				
Group	2	882.8022	441.4011	.2171
Error	10	20331.2355	2033.1236	

Table 106

Adjusted change scores of persistence (Flexibility) for five different tasks over a twelve month period in children 12-24 months of age attending day care centers with three types of eem group composition: (1) homogeneous age/ homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/homogeneous social class.

	Group 1 (N-)	Group 2 (N-)	Group 3 (N-)
Task 1	.05 (N=7)	-.06 (N=2)	-.09 (N=3)
Task 2	.01 (N=7)	-.09 (N=2)	-.09 (N=6)
Task 3	.02 (N=6)	-	-.03 (N=4)
Task 4	-.01 (N=6)	.03 (N=2)	-.02 (N=5)
Task 5	.04 (N=5)	.06 (N=2)	-.05 (N=6)

ANOV Summary

Source	df	ee SS	MS	F	
Task 1:					
Group	2	335.3187	167.6593	.0530	
Error	9	28481.1783	3164.5754		
Task 2:					
Group	2	9.3738	4.6869	.0008	
Error	12	70531.2897	5877.6075		
Task 3:					
Group	1	4166.6667	4166.6667	2.1053	
Error	8	15833.3333	1979.1667		
Task 4:					
Group	2	3996.5551	1998.2776	.5193	
Error	10	38482.0179	3848.2018		
Task 5:					
Group	2	23872.4217	11936.2108	3.3769	p .0749
Error	10	35346.2182	3534.6218		

Table 107

Adjusted change sources of persistence (continues task) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/ homogeneous social class; (2) homogeneous age (heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.06 (N=6)	+.02 (N=7)
	Heterogeneous	+.03 (N=4)	+.05 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	171.705	171.705	1	NS
Social Class	1	119.280	119.280	1	NS
Age X Social Class	1	33.074	33.074	1	NS
Error	1	9082.540	567.658	1	NS

Table 108

Adjusted change sources of persistence (time on experimenter's goal) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/ homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/ heterogeneous social class

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.09 (N=6)	+.07 (N=7)
	Heterogeneous	-.01 (N=4)	+.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	72.737	72.737	.0629	
Social Class	1	2195.861	2195.861	1.8993	
Age X Social Class	1	207.569	207.569	.1795	
Error	16	18498.687	1156.167		

Table 109

Adjusted change sources of persistence (time on child's goal) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.02 (N=6)	-.05 (N=7)
	Heterogeneous	+.01 (N=4)	-.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	18.518	18.518	.064	
Social Class	1	1283.238	1283.238	4.468	.05
Age X Social Class	1	417.351	417.351	1.453	
Error	16	4594.810	287.175		

Table 110

Adjusted change sources of persistence (ETCT) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/Heterogeneous social calss.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.06 (N=6)	+.05 (N=7)
	Heterogeneous	-.01 (N=4)	+.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	35.730	35.730	.062	
Social Class	1	1766.628	1766.628	3.080	.10
Age X Social Class	1	410.786	410.786	.716	
Error	16	9175.192	573.449		

Table 111

Adjusted change sources of persistence (affect) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.01 (N=5)	-.10 (N=8)
	Heterogeneous	+.02 (N=4)	+.04 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	2156.141	2156.141	1.932	
Social Class	1	5039.754	5039.754	.826	
Age X Social Class	1	1835.091	1835.091	.703	
Error	16	41729.573	2608.098		

Table 112

Adjusted change sources of persistence (intensity while continuing) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneouss social class..

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.01 (N=6)	+.07 (N=7)
	Heterogeneous	+.01 (N=4)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	509.782	509.782	.5760	
Social Class	1	95.397	95.397	.1078	
Age X Social Class	1	815.001	815.001	.9208	
Error	16	14161.586	885.099		

Table 113

Adjusted change sources of persistence (psychological and physical interruption) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/ heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.09 (N=6)	-.03 (N=7)
	Heterogeneous	+.02 (N=4)	-.03 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	4.797	4.797	.1660	
Social Class	1	44.490	44.490	1.5394	
Age X Social Class	1	16.708	16.708	.5781	
Error	16	462.410	28.900		

Table 114

Adjusted change sources of persistence (instrumental dependency) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogenerous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.04 (N=6)	-.02 (N=7)
	Heterogeneous	-.03 (N=4)	-.03 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	97.077	97.077	1.6691	
Social Class	1	18.129	18.129	.3117	
Age X Social Class	1	14.554	14.554	.2502	
Error	16	930.552	58.159		

Table 114a

Adjusted change scores of persistence (emotional dependency) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.01 (N=6)	-.01 (N=7)
	Heterogeneous	-.06 (N=4)	+.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	37.818	37.818	.5006	
Social Class	1	248.865	248.865	3.2942	.10
Age X Social Class	1	352.886	352.886	4.671	.05
Error	16	1208.736	75.546		

Table 115

Adjusted change sources of persistence (glances) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.03 (N=6)	+.04 (N=7)
	Heterogeneous	-.02 (n=4)	-.05 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	103.147	103.147	1.340	
Social Class	1	35.883	35.883	.466	
Age X Social Class	1	.446	.446	.005	
Error	16	1230.922	76.932		

Table 116

Adjusted change sources of persistence (flexibility) for keys of learning. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.02 (N=6)	-.08 (N=7)
	Heterogeneous	+.03 (N=4)	+.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	5629.940	5629.940	1.411	
Social Class	1	151.751	151.751	.381	
Age X Social Class	1	1205.250	1205.250	.3023	
Error	16	63797.772	3987.360		

Table 117

Adjusted change sources of persistence (continuous task) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.04 (N=5)	+.08 (N=8)
	Heterogeneous	-.02 (N=4)	+.09 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	213.770	213.770	.1185	
Social Class	1	612.535	612.535	.3397	
Age X Social Class	1	.319	.319	.0002	
Error	16	28854.597	1803.412		

Table 118

Adjusted change sources of persistence (time on E's goal) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/ heterogeneous social calss; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.02 (N=5)	-.02 (n=8)
	Heterogeneous	+.01 (N=4)	-.05 (n=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	149.012	149.012	.0346	
Social Class	1	287.442	287.442	.0667	
Age X Social Class	1	285.219	285.219	.0662	
Error	16	68935.219	4308.451		

Table 119

Adjusted change sources of persistence (time on C's goal) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.03 (N=5)	+.01 (N=8)
	Heterogeneous	-.01 (N=4)	+.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	42.522	42.552	.0118	
Social Class	1	1165.252	1165.252	.3227	
Age X Social Class	1	669.984	669.984	.1856	
Error	16	57766.308	3610.394		

Table 120

Adjusted change scores of persistence (ETCT) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/ homogeneous social class (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.09 (N=5)	-.06 (N=8)
	Heterogeneous	+.08 (N=4)	-.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	51.257	51.257	.011	
Social Class	1	1249.662	1249.662	.267	
Age X Social Class	1	17.523	17.523	.003	
Error	16	74630.438	4664.402		

Table 121

Adjusted change sources of persistence (affect) for stacking cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.02 (N=5)	-.02 (N=8)
	Heterogeneous	+.02 (N=4)	-.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	135.472	135.472	.036	
Social Class	1	7364.754	7364.754	1.978	
Age X Social Class	1	50.004	50.004	.013	
Error	16	59572.252	3723.265		

Table 122

Adjusted change sources of persistence (intensity will continuing) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.07 (N=5)	-.03 (N=8)
	Heterogeneous	+.03 (N=4)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	454.986	454.986	.657	
Social Class	1	1028.281	1028.281	1.485	
Age X Social Class	1	298.396	298.396	.431	
Error	16	11078.426	692.401		

Table 123

Adjusted change sources of persistence (psychological and physical interruption) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3)heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.01 (N=5)	-.02 (N=8)
	Heterogeneous	+.05 (N=4)	-.03 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	10.509	10.509	.0711	
Social Class	1	151.079	151.079	1.022	
Age X Social Class	1	25.874	25.874	.1751	
Error	16	2364.590	147.786		

Table 124

Adjusted change scores of persistence (instrumental dependency) for cups and saucers. Task over a 12 month priod in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/ homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.01 (N-5)	-.02 (n=8)
	Heterogeneous	+.01 (N=4)	+.05 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	93.2475	93.247	7.939	p .02
Social Class	1	18.028	18.028	1.535	
Age X Social Class	1	21.229	21.229	1.807	
Error	16	187.908	11.744		

Table 125

Adjusted change scores of persistence (emotional dependency) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.07 (N=5)	-.07 (N=8)
	Heterogeneous	-.01 (N=4)	+.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	260.014	260.014	1.422	
Social Class	1	22.408	22.408	.122	
Age X Social Class	1	391.286	391.286	2.140	
Error	16	2924.521	182.782		

Table 126

Adjusted change scores of persistence (glances) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/ homogeneous social class; (20 homogeneous age/ heterogeneous social class; (3)heterogeneous age/ homogeneous social class; (4)heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.06 (N=5)	+.02 (N=8)
	Heterogeneous	-.03 (N=4)	-.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	568.859	568.859	3.039	
Social Class	1	168.346	168.346	.899	
Age X Social Class	1	42.[illegible]	42.738	.228	
Error	16	2994.821	187.176		

Table 127

Adjusted change scores of persistence (flexibility) for cups and saucers. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age. homogeneous social class; (4)heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.03 (N=6)	-.07 (N=8)
	Heterogeneous	+.05 (N=4)	+.04 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	186.596	186.596	.035	
Social Class	1	127.334	127.334	.024	
Age X Social Class	1	101.936	101.936	.019	
Error	16	88751.860	5220.697		

Table 128

Adjusted change scores of persistence (continous task) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogenous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.07 (N=6)	+.08 (N=7)
	Heterogeneous	-.07 (N=4)	+.05 (N=2)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	16.467	16.467	.038	
Social Class	1	668.817	668.817	1.598	
Age X Social Class	1	10.668	10.668	.025	
Error	15	6274.372	418.291		

Table 129

Adjusted change scores of persistence (time of E's goal) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group compositon: (1)homogeneous age/homogenous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4)heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.01 (N=6)	+.01 (N=7)
	Heterogeneous	-.03 (N=4)	+.06 (N=2)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	22.782	22.782	.023	
Social Class	1	1224.043	1224.043	1.260	
Age X Social Class	1	350.382	350.382	.360	
Error	15	14561.813	970.787		

Table 130

Adjsuted change scores of persistence (ETCT) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3)heterogeneous age/homogeneous social class; (4)heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.01 (N=6)	+.06 (N=7)
	Heterogeneous	+.10 (N=4)	-.08 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	30.229	30.229	.047	
Social Class	1	6.904	6.904	.010	
Age X Social Class	1	1291.479	1291.479	2.029	
Error	16	10182.022	636.376		

Table 131

Adjusted change sources of persistence (affect) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.06 (N=6)	-.02 (N=7)
	Heterogeneous	+.02 (N=4)	-.04 (N=2)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	776.466	776.466	.485	
Social Class	1	997.512	997.512	.624	
Age X Social Class	1	114.322	114.322	.071	
Error	15	23968.208	1597.880		

Table 132

Adjusted change scores of persistence (intensity while continuing) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group compositon: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.02 (N=6)	+.10 (N=7)
	Heterogeneous	-.08 (N=4)	+.03 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	1864.742	1864.742	1.657	
Social Class	1	4344.563	4344.563	3.861	.10
Age X Social Class	1	49.6467	49.646	.0441	
Error	16	18003.647	1125.228		

Table 133

Adjusted change scroes of persistence (psychological and physical interuption) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/hterogeneous social class; (3) heterogeneous ag/homogeneous social class; (4) heterogenerous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.01 (n=6)	-.01 (N=7)
	Heterogeneous	+.02 (N=4)	-.02 (N=2)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	.007	.0076	.004	
Social Class	1	46.111	46.111	2.126	
Age X Social Class	1	3.201	3.201	.147	
Error	15	325.310	21.687		

Table 134

Adjusted change scores of persistence (instrumental dependency) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.04 (N=6)	+.03 (N=7)
	Heterogeneous	-.05 (N=4)	-.02 (N=2)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	125.615	125.615	1.389	
Social Class	1	.254	.254	.0028	
Age X Social Class	1	39.598	39.598	.437	
Error	15	1356.439	90.429		

Table 135

Adjusted change scores of persistence (emotional dependency) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/ homogeneous social class: (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.07 (N=6)	-.03 (N=7)
	Heterogeneous	+.05 (N=4)	+.01 (N=2)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	73.254	73.254	.8863	
Social Class	1	47.953	47.953	.580	
Age X Social Class	1	11.582	11.582	.140	
Error	15	1239.788	82.652		

Table 136

Adjusted change scores of persistence (glances) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/ hterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.08 (N=6)	+.01 (N=7)
	Heterogeneous	+.06 (N=4)	-.03 (N=2)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	6.335	6.335	.244	
Social Class	1	1.835	1.835	.070	
Age X Social Class	1	27.049	27.049	1.042	
Error	15	389.401	25.960		

Table 137

Adjusted change scores of persistence (flexibility) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homoegeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.07 (N=6)	+.01 (N=7)
	Heterogeneous	+.01 (N=4)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	332.935	332.935	.0973	
Social Class	1	332.935	332.935	.0973	
Age X Social Class	1	2996.416	2996.416	.8761	
Error	16	54720.587	3420.0367		

Table 138

Adjusted change scores of persistence (continuous task) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.02 (N=5)	+.02 (N=7)
	Heterogeneous	-.03 (N=4)	+.04 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	55.481	55.481	.0236	
Social Class	1	2036.749	2036.749	.8668	
Age X Social Class	1	1045.436	1045.436	.4449	
Error	15	35246.651	2349.776		

Table 139

Adjusted change scores of persistence (time on E's goal) for puzzles. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.02 (N=5)	+.10 (N=7)
	Heterogeneous	-.07 (N=4)	-.07 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	204.788	204.788	.086	
Social Class	1	1318.018	1318.018	.554	
Age X Social Class	1	425.295	425.295	.179	
Error	15	35647.990	2376.532		

Table 140

Adjusted change scores of persistence (time on C's Goal) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.03 (N=5)	+.06 (N=7)
	Heterogeneous	-.04 (N=4)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	113.682	113.682	1.090	
Social Class	1	116.740	116.740	1.119	
Age X Social Class	1	60.467	60.467	.579	
Error	15	1564.034	104.268		

Table 141

Adjusted change scores of persistence (ETCT) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3)heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.02 (N=5)	+.04 (N=7)
	Heterogeneous	+.05 (N=4)	+.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	1489.558	1489.5584	.689	
Social Class	1	1285.562	1285.562	.594	
Age X Social Class	1	182.744	182.744	.084	
Error	15	32427.220	2161.814		

Table 142

Adjusted change source of persistence (affect) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group exposition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3)heterogeneous age/homogeneous social class; (4)heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.01 (N=5)	-.02 (N=7)
	Heterogeneous	+.03 (N=4)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	254.007	254.007	.1328	
Social Class	1	6899.302	6899.302	3.606	.10
Age X Social Class	1	766.644	766.644	.400	
Error	15	28691.845	1912.789		

Table 143

Adjusted change scores of persistence (intensity while continuing) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1)homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.05 (N=5)	+.02 (N=7)
	Heterogeneous	+.07 (N=4)	+.03 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	5250.404	5250.404	1.493	
Social Class	1	9951.035	9951.035	2.830	
Age X Social Class	1	2514.515	2514.515	.715	
Error	15	52728.608	3515.240		

Table 144

Adjusted change sources of persistence (psychological and physical interruption) for books. Task over a 12 month period in children [illegible] months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4)heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.06 (N=5)	-.05 (N=7)
	Heterogeneous	+.03 (N=4)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	.101	.101	.000	
Social Class	1	283.791	283.791	1.919	
Age X Social Class	1	34.186	34.186	.231	
Error	15	2217.437	147.829		

Table 145

Adjusted change scores of persistence (instrumental dependences) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/ homogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	.00 (N=5)	.00 (N=7)
	Heterogeneous	.00 (N=4)	.00 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	F ratios cannot be computed				
Social Class					
Age X Social Class					
Error					

Table 146

Adjusted change scores of persistence (emotional dependency) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) hetergeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.02 (N=5)	-.05 (N=7)
	Heterogeneous	-.04 (N=4)	+.03 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	10.967	10.967	.224	
Social Class	1	18.485	18.485	.378	
Age X Social Class	1	103.997	103.997	2.129	
Error	15	732.509	48.833		

Table 147

Adjusted change source of persistence (glances) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group compositon: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.08 (N=5)	-.03 (N=7)
	Heterogeneous	-.06 (N=4)	+.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	.282	.282	.007	
Social Class	1	3.000	3.000	.076	
Age X Social Class	1	2.633	2.633	.066	
Error	15	589.945	39.329		

Table 148

Adjusted change scores of persistence (flexibility) for books. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3)heterogeneous age/ homogeneous social class; (4)heterogeneous age/ heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.05 (N=5)	+.01 (N=7)
	Heterogeneous	+.05 (N=4)	-.07 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	8067.4256	8067.425	.635	
Social Class	1	73.066	73.066	.005	
Age X Social Class	1	16617.279	16617.279	1.307	
Error	15	190581.577	12705.438		

Table 149

Adjusted change scores of persistence (continues task) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.08 (N=6)	.01 (N=7)
	Heterogeneous	+.02 (N=3)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	116.525	116.525	.134	
Social Class	1	3639.580	3639.580	4.187	
Age X Social Class	1	576.698	576.698	.663	
Error	15	13036.596	869.106		

Table 150

Adjusted change scores of persistence (time on E's goal) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group compositon: (2) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.04 (N=6)	-.01 (N=7)
	Heterogeneous	-.04 (N=3)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	586.959	586.959	.246	
Social Class	1	4926.312	4926.312	2.071	
Age X Social Class	1	1751.941	1751.941	.736	
Error	15	35675.072	2378.338		

Table 151

Adjusted change scores of persistence (time on C's goal) for candy. Task over a 12 month ½eiod in children 24-36 months of age attending day car centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.04 (N=6)	-.05 (N=7)
	Heterogeneous	-.01 (N=3)	+.04 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	104.857	104.857	.180	
Social Class	1	104.857	104.857	.180	
Age X Social Class	1	373.499	373.499	.643	
Error	15	8712.245	580.816		

Table 152

Adjusted change scores of persistence (ETCT) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/ homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.07 (N=6)	-.02 (N=7)
	Heterogeneous	+.03 (N=4)	-.03 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	1.2973	1.297	.000	
Social Class	1	3663.162	3663.162	2.027	
Age X Social Class	1	3261.764	3261.764	1.805	
Error	16	28909.525	1806.845		

Table 153

Adjusted change sources of persistence (affect) for candy in a jar. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.06 (N=6)	+.07 (N=[illegible])
	Heterogeneous	-.09 (N=3)	+.05 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	25.1383	25.138	.013	
Social Class	1	796.734	796.734	.432	
Age X Social Class	1	.235	.023	.000	
Error	15	27643.859	1842.924		

Table 154

Adjusted change scores of persistence (intensity while continuing) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of gorup composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.04 (N=6)	+.07 (N=7)
	Heterogeneous	-.02 (N=4)	-.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	890.210	890.210	.250	
Social Class	1	364.672	364.672	.102	
Age X Social Class	1	177.950	177.950	.050	
Error	15	56833.908	3552.119		

Table 155

Adjusted change scores of persistence (psychological and physical interrupting) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogenous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.07 (N=6)	+.03 (N=7)
	Heterogeneous	-.05 (N=3)	-.01 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	87.133	87.133	1.065	
Social Class	1	65.644	65.644	.802	
Age X Social Class	1	.025	.025	.000	
Error	15	1226.528	81.768		

Table 156

Adjusted change scores of persistence (instrumental dependency) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.02 (N=6)	-.04 (N=7)
	Heterogeneous	+.05 (N=3)	+.09 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	396.557	396.557	1.770	
Social Class	1	3.174	3.174	.014	
Age X Social Class	1	49.826	49.867	.222	
Error	15	3358.884	223.925		

Table 157

Adjusted change scores of persistence (emotional dependency) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group compositon: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.06 (N=6)	-.06 (N=7)
	Heterogeneous	+.06 (N=3)	+.06 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	305.877	305.877	.935	
Social Class	1	37.609	37.609	.115	
Age X Social Class	1	45.755	45.755	.140	
Error	15	4902.638	326.842		

Table 158

Adjusted change scores of persistence(glances) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	+.08 (N=6)	+.07 (N=7)
	Heterogeneous	-.02 (N=3)	-.02 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	2124.398	2124.398	5.126	
Social Class	1	.409	.409	.001	
Age X Social Class	1	.409	.409	.001	
Error	15	6215.400	414.360		

Table 159

Adjusted change scores of persistence (flexibility) for candy. Task over a 12 month period in children 24-36 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

		Social Class	
		Homogeneous	Heterogeneous
Age	Homogeneous	-.08 (N=6)	-.02 (N=7)
	Heterogeneous	+.01 (N=4)	+.04 (N=3)

Analysis of Variance Summary Table

Source	df	SS	MS	F	p
Age	1	7603.307	7603.307	1.770	
Social Class	1	499.358	499.358	.116	
Age X Social Class	1	2063.169	2063.160	.480	
Error	16	68715.553	4294.722		

Table 160

Adjusted change scores of persistence (continues task) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1 (N=22)	cell 2 (N=9)*	cell 4 (N=4)**
task 1	+.01	-.07	-.06
task 2	-.02	-.03	+.08
task 3	-.03	+.09	+.01
task 4	-.04	+.05	+.08
task 5	-.01	+.08	-.01

Analysis of Variance Summary Table

Source		df	SS	MS	F	p
Group	task 1	2	247.70		.379	.693
	task 2	2	392.93		.339	.72
	task 3	2	607.22		.283	.759
	task 4	2	620.26		.471	.634
	task 5	2	1228.07		.314	.736

* Durham, St. Chris, (King)
** TLC, Foxchase

Table 161

Adjusted change scores of persistence (time on E's goal) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous afe/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	+.06	-.03	-.02
task 2	-.06	+.04	+.02
task 3	-.02	-.02	+.01
task 4	-.03	+.07	-.04
task 5	+.02	+.07	-.10

Analysis of Variance Summary Table
(to be used to determine necessity of
post-hoc tests in 2-cell comparisons)

Source		df	SS	MS	F
Group	task 1	2	2128.83	1064.42	.637
	task 2	2	1862.97	931.49	.248
	task 3	2	845.24	422.62	.314
	task 4	2	574.27		.147
	task 5	2	547.39	273.70	.125

Table 162

Adjusted change scores of persistence (time on C's goal) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	-.02	+.05	-.02
task 2	+.07	-.01	-.09
task 3	-.01	+.05	-.03
task 4	-.06	-.04	-.01
task 5	-.02	+.07	-.03

Analysis of Variance Summary Table
(to be used to determine necessity of post-hoc tests in 2-cell comparisons)

Source		df	SS	F
Group	task 1	2	215.52	.102
	task 2	2	671.00	.180
	task 3	2	235.93	.795
	task 4	2	1024.50	.578
	task 5	2	424.955	1.134

Table 163

Adjusted change scores of persistence (ETCT) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group composition: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	+.05	-.05	-.10
task 2	-.05	+.03	+.01
task 3	+.03	-.01	+.04
task 4	-.02	+.07	-.07
task 5	-.02	-.05	-.01

ANOV Summary Table
(to be used to determine necessity of post-hoc tests in 2-cell comparisons)

Source		df	SS	F	P
Group	task 1	2	819.67	.287	.756
	task 2	2	1210.897	.146	.865
	task 3	2	870.95	1.334	.279
	task 4	2	826.117	.208	.815
	task 5	2	463.04	.471	.634

Table 164

Adjusted change scores of persistence (overall effect) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with fours types of group composition: (1) homogeneous age/homogeneous social class (2) homogeneous age/hterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	+.05	-.10	-.09
task 2	-.05	+.01	-.02
task 3	-.07	+.05	-.06
task 4	-.07	+.10	-.02
task 5	+.04	-.01	+.03

ANOV Summary Table
(to be used to determine necessity of
post-hoc tests in 2-cell comparisons)

Source		df	SS	F
Group	task 1	2	824.33	.1612
	task 2	2	1103.66	.227
	task 3	2	423.737	.2907
	task 4	2	3090.43	.5328
	task 5	2	966.84	.0963

Table 165

Adjusted change scores of persistence (Intensity while continuing task) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group compositions: (1) homogeneous age/ homogeneous social class; (2) homogeneous age/ heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	+.04	+.01	-.05
task 2	-.04	+.01	-.09
task 3	-.05	+.02	-.02
task 4	-.05	+.10	+.01
task 5	-.01	+.01	+.03

ANOV Summary Table
(to be used to determine necessity of
post-hoc tests in 2-cell comparisons)

Source		df	SS	F	P
Group	task 1	2	139.33	.0965	.907
	task 2	2	1558.47	.7278	.504
	task 3	2	5081.85	2.6506	<.10
	task 4	2	834.43	.1265	.881
	task 5	2	51.92	.0055	.995

Table 166

Adjusted change scores of persistence (Psychological and Physical Interruption) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group compositions: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	.-03	+.09	+.01
task 2	+.09	-.01	-.02
task 3	+.08	-.03	-.03
task 4	+.09	-.09	-.02
task 5	-.08	+.06	+.02

ANOV Summary Table
(to be used to determine necessity of
post-hoc tests in 2-cell comparisons)

Source		df	SS	MS	F
Group	task 1	2	11.697	5.898	.269
	task 2	2	29.885	14.942	.567
	task 3	2	53.807	26.903	.390
	task 4	2	29.462	14.731	.351
	task 5	2	25.869	12.934	.103

Table 167

Adjusted change scores of persitence (Instrumental Dependency) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group compositions: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/ homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	-.02	+.04	-.10
task 2	-.01	+.03	-.03
task 3	+.01	-.02	-.02
task 4	+.05	-.06	-.08
task 5	-.08	-.09	+.05

ANOV Summary Table
(to be used to determine necessity of
post-hoc tests in 2-cell comparisons)

Source		df	SS	F	P
Group	task 1	2	152.87	1.1954	.317
	task 2	2	55.26	.6694	.524
	task 3	2	50.459	.2656	.771
	task 4	2	7.490	.3859	.688
	task 5	2	162.96	1.875	.171

Table 168

Adjusted change scores of persistence (Emotional Dependency) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group compositions: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous ag/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	-.03	+.03	+.05
task 2	-.02	+.01	-.02
task 3	-.02	+.02	+.03
task 4	-.03	+.01	-.09
task 5	-.03	+.06	-.03

ANOV Summary Table
(to be used to determine necessity of post-hoc tests in 2-cell comparisons)

Source		df	SS	F	P
Group	task 1	2	249.57	.878	.570
	task 2	2	32.11	.146	.864
	task 3	2	119.36	2.545	.095
	task 4	2	14.11	.113	.843
	task 5	2	298.36	.559	.583

Table 169

Adjusted change scores of persistence (Glancee) for candy. Task over a 12 month period in children 36-48 months of age attending day care centers with four types of group compositions: (1) homogeneous age/homogeneous social class; (2) homogneeous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	+.04	-.06	-.03
task 2	+.01	-.06	-.03
task 3	+.01	-.04	+.02
task 4	+.07	+.05	-.04
task 5	-.05	+.04	+.01

ANOV Summary Table

(to be used to determine necessity of post-hoc tests in 2-cell comparisons)

Source		df	SS	F	P
Group	task 1	2	330.48	1.443	.252
	task 2	2	74.34	.298	.748
	task 3	2	128.207	1.540	.231
	task 4	2	125.737	.480	.629
	task 5	2	1050.83	.902	.579

Table 170

Adjusted change scores of persistence (Flexibility) for candy. Task over 12 month period in children 36-48 months of age attending day care centers with four types of group compositions: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeneous social class; (3) heterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

	cell 1	cell 2	cell 4
task 1	-.02	-.03	+.08
task 2	+.08	-.01	-.04
task 3	-.01	-.01	+.03
task 4	-.01	-.04	+.05
task 5	+.01	-.01	-.03

ANOV Summary Table

(to be used to determine the necessity of post-hoc tests in 2-cell comparisons)

Source		df	SS	F	P
Group	task 1	2	4740.095	1.943	.160
	task 2	2	1544.13	.128	.879
	task 3	2	7820.985	.912	.584
	task 4	2	18349.54	.931	.591
	task 5	2	5594.99	.468	.636

Table 171

12 - 24 month IQ Scores: Cell 1 vs. 3

			Social Class
			Homogeneous
Age	Homogeneous	Pre	105.545
		Post	102.545
	Heterogeneous	Pre	93.500
		Post	91.000

ANOV Summary

Source	df	SS	F	P
Age	1	235.455	1.237	< .290
Pre-post	1	55.538	.172	< .687
AgeX Pre-post	1	.212	.001	< .980
Error (within)	11	3559.250		
Error (between	11	2093.352		

Table 172

Adjusted change scores of IQ over a twelve month period in children 24-36 months of age attending day care centers with four types of group compositions: (1) homogeneous age/homogeneous social class; (2) homogeneous age/heterogeuеous social classs; (3) hterogeneous age/homogeneous social class; (4) heterogeneous age/heterogeneous social class.

Social Class

		Homogeneous		Heterogeneous	
Age	Homogeneous	-.04	(N=14)	-.02	(N=10)
	Heterogeneous	+.07	(N=2)	+.01	(N=5)

ANOV Summary

Source	df	SS	MS	F	P
Age	1	676.868	676.868	4.184	< .05
Social Class	1	54.648	54.648	.3378	NS
Age X Social Class	1	12.94	12.943	.0800	NS
Error	27	4367.381	161.754		

APPENDICES

APPENDIX A: LISTING OF THE OBSERVATIONAL CATEGORIES

Situational Categories

Free Play - a situation in which the target child and the majority of the other children in the room are free to do any activity in any part of the room.

Structured Situation - a situation in which the activity of the target child and the majority of the children in the room has been fixed by the teacher.

Organization of Interaction

Initiating Action - the first action in an interaction.

Example: A child approaches another child and says "Hi."

Response Action - All actions following the first action of an interaction.

Example: A child approaches a second child and says "Hi" and the second child smiles. The second child's smiling is a response action. Also, any other subsequent actions that either child makes in the interaction are response actions.

Approach Behavior - an action or response by which a child or adult moves toward or into the psychological or physical space of another.

Example: A child walks up to a teacher and asks a question.

In Contact Behavior - an action or response by which an actor remains active within the psychological or physical space of another.

Example: A child replies to something another child has said.

Terminating Behavior - an attempt to leave the psychological or physical space of another.

Example: A child turns and looks away, ignoring another child's question.

Content Categories of Social Interaction - An interaction is defined as an episode in which the child or his partner is some way responds or fails to respond to the initiation of the other child.

Accidental Contact - the act of unintentionally touching another person.

Examples: 1) One child has a foot on another child's hand without realizing it.

2) One child bumps into another child while in the process of going somewhere.

Active Acceptance - the taking up of another's suggestion, invitation, offer.

Examples: 1) A teacher says to a child, "Would you like to play with puzzles" and the child picks up a puzzle and begins to play with it.

2) A child hands another child a toy. That child takes the toy.

Affection - verbal or physical expression of warmth, interest, and general positive feelings.

Example: A child comes over to the teacher and hugs her while smiling.

Boasting - a child extols himself, his abilities, or his possessions in comparison to another.

Example: "I'm taller than you are."

Competition - occurs when two children are working simultaneously at tasks and, for at least one of them, success at the task is understood in relation to the other actor.

Example: A child rides her bicycle faster in response to being passed by another child.

Compliance - the act of acquiescing to a command or request made by another.

Example: Teacher tells a child to sit down and he does sit down.

Completion - child finishes a task which involves solving a difficult problem or creating a finished product.

Example: A child puts the last piece into a puzzle which she has been working on.

Cooperation - the act of two or more people mutually using the same object, part of the object, or continuously involved in both the same activity and goal. The importance here is in the interaction since the two people involved are mutually responding to each other in relation to the task.

Examples: 1) Target child builds one part of a block structure while other child builds other part.

2) Child pulls another child in a wagon after the same child pulls the target child in the wagon.

Crying - the act of crying.

Demand - a declaration of desire spoken in a group but directed to no one in particular.

Example: A child says to no one in particular "Let's sing Jingle Bells."

Destruction - actual or attempted harm to property.

Example: Child kicks object across the room.

Direction - the attempt to dictate another's activity.

Example: Teacher looks at a child and says, "Peter, play with your puzzle."

Egocentric Speech - are those verbalizations that are not directed towards a person or to an object that the child is using; they can be articulate or inarticulate.

Example: Child asks and answers his own questions.

Note: verbalizations that are part of an activity, such as engine noises or animal sounds, are not scored.

Facilitating - removing an obstacle so that the individual or the group involved in an activity can continue or progress towards a goal.

Example: A child is climbing a bridge of play blocks. When he completion of task.

Examples: 1) Child is involved in playing with a puzzle.

2) Child is involved in play on a slide.

Group Goal Directed Activity - goal directed activity is set up by the teacher for the children. All the participants in the activity share a common goal or task.

Example: Children help the teacher to make pancake batter.

Helping - assisting another person without a request being made for the assistance.

Examples: 1) A child's shirt is caught on part of a slide and another child comes over to free it.

2) A child picks up something for another child.

Hoarding - is the act of showing off or offering to another child on amassed quantity of toys, etc. and subsequently not allowing the child to participate in use of the toys.

Example: One child shows another his bicycle, starts to let him ride it, and then changes his mind.

Imitation - a child observes another child or adult performing an activity and spontaneously performs a similar activity. The intent here is to observe and copy the task.

Example: A child in the room starts banging on something. Upon hearing or seeing the other child, the child we are observing starts to bang on something.

Intentional Physical Contact - the act of touching a child or adult.

Example: Child sits on a teacher's lap.

Interference - the act of interrupting the activity of another; blocking another's path; graffing for, taking, or using an object that belongs to another.

Examples: 1) A child is building a tower with blocks and another child knocks the tower down.

2) A teacher very abruptly takes away the toy with which a child is playing.

Inviting - the act of signaling another to join one's activity.

Examples: 1) A child asks another child to join him.

2) A child throws a ball to another child to initiate a game.

Involved Looking - looking at a person for more than 3 seconds. The "looking" here implies some involvement/curiosity in the child or adult.

Involved - Non-involved - the act of beginning an activity and then terminating it within a very short amount of time.

Example: A child puts one piece of a puzzle in place and then stops.

Manipulation - the use of promises or threats to influence the behavior of a child.

Example: "I'll be your friend if you let me have the first turn on the swing."

Modeling - an illustrative or demonstrative action that is performed by a child or adult for another to follow.

Example: "This is the way to do it."

Moving Away - physical movement away from a person or a group.

Moving Towards - the movement of a child towards a child, teacher or group.

Negative Affect - facial expression of anger or unhappiness.

Negative Direction - a stern or unfriendly attempt to dictate another's activity.

Example: "Stop that right now!"

Negative Seeking Attention - a negative attempt to attract a response from another person by way of a gesture or verbalization.

Example: A child repeatedly asks a teacher if it is time for lunch eventhough she has just answered him.

No Response - the actor's attempts at interaction are noticed but are not responded to.

Example: A child or adult apparently hears target child ask a question but does not answer.

Non-Applicable - this is scored when a response is not forthcoming because the expected respondent does not notice the action that is directed toward him and so cannot respond.

Example: A child says something to a teacher but the teacher does not hear him.

Non-Involved - child's actions are such that they are not directed towards a specific goal. In addition, incidental toys that are picked up (or held) by the child are not used in a purposive manner.

Examples: 1) Child sits with other children in a group but does not participate.

2) Child wanders around room aimlessly.

Observer Non-Response - the blank look with which an observer responds to the child he is observing when that child attempts to interact with him.

Organized Activity - goal directed activity is set up by the teachers for the children. The activity is the same for all the children, but each child works on his own project.

Example: Children are at table with clay. Each works with his own piece of clay.

Parallel Play - child plays with a toy or activity while nearby another child is engaged in the same activity. The children do not interact with reference to their activity.

Example: A child builds with blocks by himself while another child plays with blocks nearby.

Partial Compliance - responding to a request/command made by another, child either begins to comply and then stops, or he first ignores the request or acts contrary to it, but changes towards compliance.

Example: Teacher tells a child to stop banging on a drum. The child stops for a few moments but then starts soon again.

Peripheral Proximity - physically within the radius of a group although not actively involved in the activity of the group.

Example: A child is working on a puzzle in the vicinity of a group of children who are listening to the teacher tell a story.

Perseveration - a child repeatedly does the same activity or repeats the same verbalization.

Example: Child repeats the same word ten times.

Persistence - continuing with the same task for two minutes; also, overcoming obstacles in order to reach a goal.

Playful Contact - physical contact with another person which is part of a game and is not meant to harm.

Example: Two children laughing while wrestling each other.

Positive Affect - facial expression of happiness, pleasure, etc.

Example: Smiling

Positive Direction - a friendly attempt to dictate another's activity.

Example: "You sing very well. Sing some more."

Positive Seeking Attention - an attempt to attract a response from another person by way of a gesture or verbalization.

Examples:

1) Child runs over to teacher and says, "Teacher, teacher" while pulling at her sleeve.
2) Child stamps feet loudly during time of relative quiet in classroom.

Praise - verbal or physical action which is intended to show approval of another's actions.

Examples: 1) "You're a good boy, John."

2) A teacher pats a child on back to indicate approval.

Rebelling - refusal to comply with an attempt at control (direction, interference) by another person or with a routine procedure in the classroom.

Examples: 1) Teacher says, "Put your coat on," child responds "No."

2) Children put their coats on to go outside, and the child tries to run away.

Redirection - an attempt to dictate another's activity by interrupting on-going activity.

Example: Teacher tells a child to stop playing ball and to start finger painting.

Rejection - negative verbal response to attempt at positive contact by another person. Rejection is differentiated from active non-acceptance in that it is not merely a choice or decision process, but implies rejection of the other person's positive approach.

Example: A child offers a block to another child who says "I don't want your toy."

Return to Self-Interrupted Activity - the child voluntarily stops activity in which he is involved; after a significant time has passed the child voluntarily returns to his original activity.

Seeking Help - an attempt to attract the assistance of a particular person by way of a gesture or verbalization.

Example: Child walks over to teacher with a puzzle and says, "I can't do it."

Seeking Praise and Approval - an attempt to attract from another person a positive response for one's action or achievement.

Example: "Look what I made, teacher." "Do you like this picture I made?"

Self-Assertion - the act of defining some object, or activity area, as one's own.

Examples: 1) "This is mine."

2) "I'm playing here."

Self-Interruption - the child voluntarily stops an activity in which he is involved. This does not occur due to external environment.

Example: A child leaves a tower of blocks he has been building and starts to work on a puzzle.

Sharing - the act of offering an object in one's possession to another person.

Example: One child gives an object to another child without having been asked.

Showing - the act of presenting an object that is in one's possession to another person. Vocalizations may or may not be involved.

Example: Actor A walks over to Actor B, presents a toy, and says, "See."

Social Participation - verbal or social contact with another person.

Examples: 1) Child smiles at another child who is looking at him.

2) One child asks another a question.

3) The other child replies to the question.

Socially Withdrawn - is the act of staring at another person/child for at least one minute; shying away from further contact with child or adult while continuing to be aware of that child or adult.

Example: A child sits in a corner and stares at the other children who are playing.

Social Withdrawal (from a negative approach) - the act of looking, turning, or moving away from another in response to a negative approach.

Example: One child threatens another and that child turns away.

Social Withdrawal (from a positive approach) - the act of looking, turning, or moving away from another in response to a positive approach.

Example: One child asks another a question and that child turns his head and looks away.

Success - the child shows satisfaction at the accomplishment of his own product or social interaction.

Examples: 1) The child finishes a puzzle and smiles broadly and says, "I'm done."

2) Child invites another child to play with him. The other child joins in the game and the first child smiles broadly.

Suggesting - an attempt on the part of an actor to change or influence another's activity in which the actor leaves to that other person the decision of whether or not to change.

Example: Teacher says to a child, "Would you like to use the red crayon?"

Taking Initiative - choosing and beginning an activity by oneself.

Example: A child picks up a puzzle and starts to play with it.

Teasing - attempting to annoy and embarrass another person.

Example: One child repeatedly says to another "You don't know how to play. You don't know how to play."

Threat - a declaration or gesture indicating that one intends to inflict harm on a child or adult.

Example: "I'm going to hit you."

Unscored - signifies that an action cannot be coded from the information provided in the description.

Verbal Aggression - verbal expression of hostility, derogation, or dislike.

Example: "You're stupid."

Withdrawal - see social withdrawal.

APPENDICES B1 - B3

JOB	Target Child
BY	Coder
DATE	

PUNCHING INSTRUCTIONS

		CARD FORM NO.
GRAPHIC		
PUNCH		

(Normally only the coded data appear on these The transcript of the recorded observation and of categories have been added here.)

Appendix B1 - Coding Analysis

nscript of corded ser- ion	ed a	Categories
First free play observation. Begin.	1 0 2	day care center*
	1	classroom*
	3 4 5	target child(Joe)*
Joe goes over to Ted and smiles.	1	Beginning of situation
	3 4 5	Joe
	34 8	Ted
	6 7	social participation
	1 1	approach
	1 8	positive affect
Ted says "Hi"	2	situation continues
	3 4 8	Ted
	34 5	Joe
	6 7	social participation
	1 2	maintaining contact
		neutral affect
Joe gives him a toy	2	situation continues
	3 4 5	Joe
	34 8	Ted
	7 7	sharing
	1 2	maintaining contact
		neutral affect
Ted takes it	2	situation continues
	34 8	Ted
	3 4 5	Joe
	2 0	active acceptance
	1 2	maintaining contact
	1 0	free play situation
	1	first observation in free play
	0 1	first keypunch card in this obs.

script f rded rvation	d data	Categories
	1 0 2	
	1	
	3 4 5	
Joe starts to play with blocks	2	situation continues
	3 4 5	Joe
	88 7	inanimate object
	3 9	goal-directed alone
		neutral affect
	2	situation continues
	8 8 7	inanimate object
	3 4 5	Joe
	1 4 1 2	"filler" response to preserve dyadic form
Ted comes over and they play together, taking turns building a tower with the blocks	2	situation continues
	3 4 8	Ted
	3 4 5	Joe
	26	cooperation
	1 1	approach
	2	situation continues
	3 4 5	Joe
	3 4 8	Ted
	2 6	cooperation
	1 2	maintaining contact
	1 0	free play situation
	1	first observation in free play
	0 2	first keypunch card in this obs.

* No. of forms per pad may vary

← Fold Back

Appendix b : Content Categories

1.
2. } Actor
3.
4.
5. } Recipient
6.
7. Structure - (organized work)
8. Structure - (group goal)
9. Structure - (teacher directed)
10. Free play
11. Approach
12. In contact
13. Avoidance
14. Not applicable
15. Unscored
16. No response
17. Negative affect
18. Positive affect
19. No category for this number
20. Active acceptance
21. Affection
22. Boasting
23. Competition
24. Completion
25. Compliance
26. Cooperation
27. Demand
28. Destruction
29. Direction
30. Dramatic play (alone)
31. Dramatic play (with others)
32. Egocentric speech
33. Embarrassment
34. Facilitation
35. Failure
36. Function pleasure
37. Giving up
38. Glancing
39. Goal directed alone
40. Group goal directed
41. Helping
42. Hoarding
43. Imitation
44. Interference
45. Intentional physical contact
46. Involved - non-involved
47. Involved looking
48. Inviting
49. Manipulation
50. Modeling
51. Moving away
52. Moving towards
53. Social withdrawal from a positive approach
54. Negative seeking attention
55. Crying
56. Non-involved
57. Organized activity
58. Parallel play
59. Partial compliance
60. Peripheral proximity
61. Persistence
62. Perseveration
63. Physical aggression
64. Playful contact
65. Social withdrawal from a negative approach
66. Positive seeking attention
67. Social participation
68. Praise
69. Rebelling
70. Redirection
71. Rejection
72. Return to self-interrupted activity
73. Seeking help
74. Seeking praise and approval
75. Self-assertion
76. Self-interrupted
77. Sharing
78. Showing
79. Socially withdrawn
80. Success
81. Suggestion
82. Taking initiative
83. Teasing
84. Threat
85. Verbal aggression
86. Withdrawal
87. Unintentional physical contact
88. Active non-acceptance
89. Observer response
90. Positive direction
91. Negative direction

Appendix C 1: Sample Sheet for Timing Variables

NAME OF CENTER ____________________

NAME OF CHILD ____________________

	STRUCTURED					FREE PLAY				
	1st 2-minute observation	2nd 2-minute observation								
VARIABLES	1	2	3	4	5	1	2	3	4	5
Goal Directed Alone										
Group Goal Directed										
Organized Group Directed										
Dramatic Play Alone										
Dramatic Play with Others										
Cooperative Play										
Parallel Play										
Competition										
Intentional Physical Contact										
Playful Contact										
Involved Looking										
Time Alone (Parallel play, non-involved, Goal Directed alone)										
Time with Others (Social participation, Cooperation, Competition, Play)										
Non-involved										
Social Participation (Teasing, Suggestion, Praise, Demand, Self-assertion)										

Appendix C 2: Field Lay-out for Interactional Data (two-minute segments)

Col.	1-3	number of daycare center			
	4	blank			
	5	classroom number			
	6	blank			
	7-9	target child's number			
	10-12	blank			
	13-27	action #1			
	13	1= start of string of actions	2= otherwise		
	14-16	number of actor			
	17-19	number of recipient			
	20-21	category of action (14, 16, 19-36)			
	22-23	category of continuity	11=approach	12=contact	13=avoidance
	24-25	category of affect	17=negative	18=positive	
	26-27	blank			
	28-42	action #2			
	43-57	action #3			
	58-72	action #4			
	73	blank			
	74-75	09=structure	10=free play		
	76	blank			
	77	number of observation for the structure			
	78	blank			
	79-80	card number of 2 minute interaction			

Appendix C 3: Field Layout for Classroom Master Cards

Column	1 - 3	number of daycase center		
	4	blank		
	5	SES	1=mixed	2=homo
	6	blank		
	7	Age	1=mixed	2=homo
	8	blank		
	9	number of classroom		
	10	blank		
	11	number of teachers in classroom		
	12	blank		
	13	number of aides in classroom		
	14	blank		
	15 - 16	number of children in classroom		
	17	blank		
	18	usual number of teachers		
	19	blank		
	20 - 21	usual number of children		
	22	blank		
	79 - 80	Master Classroom M.C.		

Appendix D: Scoring Form for Ratings of Teacher Functioning

OBSERVED CAREGIVER ____________________ RATER ____________________

OTHER ____________________ PARTNER ____________________

OTHER ____________________ DATE ____________________

BOYS _____ AGE RANGE _____-_____mos. TIME ____________________

GIRLS _____ AGE RANGE _____-_____mos. ACTIVITY OBSERVED ____________________

CENTER ____________________ PARENT CHILD usual _____ today _____

SENSITIVITY	low	1	2	3	4	5	6	7	8	9	high
INDIVIDUAL VS GROUP NEEDS	group	1	2	3	4	5	6	7	8	9	individual
CLASSROOM ARRANGEMENT Free Play	assigned	1	2	3	4	5	6	7	8	9	free
Structured	assigned	1	2	3	4	5	6	7	8	9	free
APPROACH TO LEARNING	demonstrations	1	2	3	4	5	6	7	8	9	stimulation
FLEXIBILITY IN PROGRAMMING	scheduled	1	2	3	4	5	6	7	8	9	free
CONTROL OF MATERIALS Choice	adult	1	2	3	4	5	6	7	8	9	child
Use	adult	1	2	3	4	5	6	7	8	9	child
FACILITATION	low	1	2	3	4	5	6	7	8	9	high
INTRUSIVENESS	low	1	2	3	4	5	6	7	8	9	high
DISTINCTION BETWEEN WORK, ROUTINES, AND PLAY	distinguishes	1	2	3	4	5	6	7	8	9	combines
PRAISE AND APPROVAL	frequent	1	2	3	4	5	6	7	8	9	infrequent
CRITICISM AND DISAPPROVAL	infrequent	1	2	3	4	5	6	7	8	9	frequent
EXPRESSED AFFECTION (CLOSENESS)	undemonstrative	1	2	3	4	5	6	7	8	9	expressive
CONTROL OF CHILDREN (AMOUNT)	strict	1	2	3	4	5	6	7	8	9	lenient
USE OF TIME: Custodial		1	2	3	4	5	6	7	8	9	
Educational		1	2	3	4	5	6	7	8	9	
Inactive		1	2	3	4	5	6	7	8	9	
RESPONSIVENESS		1	2	3	4	5	6	7	8	9	
VERBAL INTERACTION		1	2	3	4	5	6	7	8	9	

Appendix D-2: Field Lay-out for Teacher Ratings

Col. 1-3	Day Care Center No.
Col. 4	Blank
Col. 5	Classroom No.
Col. 6	Blank
Col. 7-9	Teacher No.
Col. 10-12	Blank
Col. 13	Scale 1: Sensitivity
Col. 14	Scale 2: Individual vs Group Needs
Col. 15	Scale 3: Approach to Learning
Col. 16	Scale 4: Flexibility in Programming
Col. 17	Scale 5: Control of Materials - Choice
Col. 18	Scale 6: Control of Materials - Use
Col. 19	Scale 7: Facilitation
Col. 20	Scale 8: Intrusiveness
Col. 21	Scale 9: Praise and Approval
Col. 22	Scale 10: Criticism and Disapproval
Col. 23	Scale 11: Expressed Affection
Col. 24	Scale 12: Use of Time - 1
Col. 25	Scale 13: Use of Time - 2
Col. 26	Scale 14: Use of Time - 3
Col. 27	Scale 15: Distinction between Work and Play
Col. 28	Scale 16: Amount of Control
Col. 29	Scale 17: Classroom Arrangement - Structure
Col. 30	Scale 18: Classroom Arrangement - Free Play
Col. 31	Scale 19: Responsiveness
Col. 32	Scale 20: Verbal Interaction
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.	
.	
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Col. 79-80	Teacher Scales

APPENDIX D4 : RATINGS OF TEACHER FUNCTIONING

SENSITIVITY

1. _____Teacher is indiscriminate in her dealings with children. She does not adjust herself to individual differences among the children.

2. _____

3. _____Teacher adjusts her behavior usually only when the child's demands reach crisis proportions.

4. _____

5. _____Teacher is generally aware of individual needs but appears mainly to gear her response toward keeping the child from disruptive or unacceptable behavior.

6. _____

7. _____Teacher is sensitive to individual needs and responds to them rather openly but perhaps in "trying to be fair" tends to handle children alike.

8. _____

9. _____Teacher is sensitive to individual needs and responds to them openly. She deals with the children as individuals, adjusting her expectations and reactions to the individual personality of the child.

Individual vs. Group Needs.

Please rate the extent to which the teacher seems to be concerned with and attentive to the needs of individual children or the class as a whole. Does the teacher direct her efforts toward the group as a group, rather than allowing children to be "special" or "different"?

Please do not rate the teacher on how well she attends to individual or group needs but only the direction of her concern.

1. ________ Group needs dominant.
2. ________
3. ________ Group needs are more prominent than individual needs.
4. ________
5. ________ Varies between group needs and individual needs.
6. ________
7. ________ Individual needs are more prominent than group needs.
8. ________
9. ________ Individual needs dominant.

Ratings of Teacher Functioning

Approach to Learning

Please rate the extent to which the teacher gives the pupils learning experiences which are assortments of facts, exercises or practice by repetition. For example, does the teacher stimulate the children to wonder or does she present a lesson or demonstration expecting the children to learn by practice and imitation?

Please do not rate the teacher on how __successfully__ she either supplies facts or stimulates thinking. Consider only the extent to which she seems to be trying to do one or the other.

1. ______ The teacher provides demonstrations, facts and information.

2. ______

3. ______ The teacher emphasizes mainly the acquisition of skills and information, but occasionally provides opportunity for spontaneous inquiry and expression.

4. ______

5. ______ The teacher does some of both; giving information, teaching skills and inquiry and independent thought.

6. ______

7. ______ The teacher emphasizes mainly stimulation of independent inquiry and expression, and only occasionally provides information and skill practice to her children.

8. ______

9. ______ The teacher encourages the children to think and explore. She provides facts and skill training only when requested by the child or as part of the child-initiated activities.

Control of Materials

Please rate the extent to which the teacher controls instructional materials.

NOTE: Teacher may vary control around choice of materials versus use of materials. Try to consider both aspects in your rating. Make note as to basis of decision.

1.________Teacher clearly and firmly directs the use of materials.

2.________

3.________Teacher directs use of materials most of the time.

4.________

5.________Teacher and children fluctuate in determining choice and use of materials.

6.________

7.________Children select materials to be used most of the time. Teacher remains in the background or facilitates.

8.________

9.________Children are dominant, may select and use materials at will.

Ratings of Teacher Functioning

FACILITATION SCALES

1. _____ Caregiver is inattentive or unaware of child's activity. She does not move

to assist the child in his activities or goals. She may be either passive and nonresponsive or intrusive. She may enter into the child's activity disregarding the goals or needs. This may be done in a positive way, directing his behavior and doing the task for him, or it may be done in a negative way, stopping the activity, taking something away from him or interfering in some other way. Caregiver does not show him any new behavior, protect him from distraction, show sensitivity to his state, or give verbal descriptions of what the child is doing.

2. _____

3. _____ Caregiver is somewhat interested in the child's activity and goals. She

may sometimes help him, but most of the time she ignores him. She responds sometimes to his requests, but the majority of the time she ignores not responds. She may intervene positively or negatively (as in #1). In general, she does not move materials to help the child obtain his goals. She may sometimes show sensitivity to his state, or give verbal descriptions of what the child is doing, but this occurs less than half of the time.

4. _____

5. _____ Caregiver responds to the child's requests as often as she ignores them.

She is inconsistent in regard to her interest in the child. She is sometimes with the child in regard to his activities and goals, but she is also sometimes not with him in regard to these factors. She moves materials to help the child obtain his goals about half of the time. About half of the time she may show the child new behavior, protect him from distraction, show sensitivity to his state, or give verbal descriptions of what the child is doing, but about half of the time she does not do this.

6. _____

7. _____ Caregiver usually, but not always, responds to the child's requests. She is

fairly consistent in her interest in the child. She is generally tuned into his activities and goals. She usually moves materials to help the child obtain his goals. She is fairly consistent in showing the child new behavior, protecting him from distraction, showing sensitivity to his state, and giving verbal descriptions of what he is doing. With a nonverbal child she exerts some effort to understand the goal of the child's activity and his requests. With a verbal child she sometimes sees the information from him with regard to his needs or goals and alters her behavior accordingly.

FACILITATION SCALES (Cont'd)

8. _____

9. _____ Caregiver assesses the child's goal and moves in response to the child's

requests. She makes subtle suggestions of minimal demonstrations, sometimes encouraging him to do it himself. She gives the amount of aid the child either requests or needs, regarding the individual needs of the child. She offers assistance in the form of suggestion, question, or rearranging materials which block the child's activity. With a nonverbal child she exerts a great deal of effort to understand the goal of his activity and requests. She may check with other adult caregivers about information which she needs to help the child. With a verbal child she seeks the information from him with regard to his needs or goals or alters her behavior accordingly.

Ratings of Teacher Functioning

INTRUSIVENESS SCALES

1. _____ Caregiver does not alter the behavior of the child or impose her own goals

on the child. She always attempts to assess the child's goal before initiating any action. She does not interfere with the child's activity. She does not enter irregardless of the child except in regard to snack, toileting, or if danger arises. She does not insist on telling him what to do or how to do it. Her redirection of the child is made so that he receives ample warning, time and freedom to fulfill her requests in his own way (except for snacks, toileting, or danger). She lets the child complete his own tasks. However, she may resort to more active techniques if they seem necessary.

2. _____

3. _____ Caregiver usually attempts to assess the child's goal before initiating any

action. She rarely alters the behavior of the child or imposes her own goals on the child, except in case of snack, toileting, or danger. She usually does not insist on telling the child what to do or how to do it once she has made a suggestion unless he needs or asks for help. She may resort to more active techniques if necessary. She usually redirects a child so that he has enough warning, time, and freedom to fulfill her request in his own way. She usually lets the child complete his own tasks.

4. _____

5. _____ Caregiver may or may not attempt to assess the child's goal before initiat-

ing any action. She may or may not alter the behavior of the child or impose her own goals on the child. She may, at times, insist upon telling him what to do or how to do it once she has made a suggestion, although he may not need or ask for her help. She does not always warn the child before a transition from individual activity to group activity takes place. She does not consistently let the child complete his own tasks.

6. _____

7. _____ Caregiver rarely attempts to assess the child's goal before initiating any

action. She usually alters the behavior of the child or imposes her own goals on the child. She usually insists on telling him what to do or how to do it once she has made a suggestion even though he may not need or ask for her help. She usually does not warn the child before a transition from individual activity to group activity takes place. She usually does not let the child try to complete his own tasks when he can't do it.

8. _____

9. _____ Caregiver never attempts to assess the child's goal before initiating any

action. She always alters the behavior of the child or imposes her own goals on the child. She always insists on telling him what to do or how to do it once she

INTRUSIVENESS SCALES (Cont'd)

has made a suggestion even though he may not need or ask for her help. She never warns the child before a transition from individual to group activity takes place. She always completes the task for the child.

Praise and Approval

Please rate the amount of praise and approval given to children as a characteristic style of the teacher.

1. ________ Praise and commendation given frequently and liberally. Teacher appears to look for opportunities to praise children.

2. ________

3. ________ Emphasis on praising with some noteworthy behaviors left unrewarded

4. ________

5. ________ Praise and commendation given moderately.

6. ________

7. ________ Praise and commendation usually given only for 'good' performance

8. ________

9. ________ Teacher almost never gives praise and commendation.

Criticism and Disapproval

Please rate amount of criticism, disapproval and fault-finding that appear characteristic of the teacher.

1. ________ Almost never criticizes children.

2. ________

3. ________ Criticism and disapproval mainly for only very 'unacceptable' behavior.

4. ________

5. ________ Criticism, disapproval and fault-finding moderate.

6. ________

7. ________ Teacher often finds fault and criticizes children.

8. ________

9. ________ Continuous criticism, disapproval and fault-finding.

RATINGS OF TEACHER FUNCTIONING

EXPRESSED AFFECTION: Please rate the amount of closeness which the teacher allows or encourages. This is without regard to its approproateness.

1. _____Teacher is undemonstrative: i.e., very little relaxed emotional warmth being expressed. Physical contact is rare.

2. _____

3. _____Teacher is affectively expressive, but usually withdraws from physical contact.

4. _____

5. _____Closeness is usually determined by crisis situations such as arguments, frustrations, needs for assistance, etc. When things are going well, she is not particularly demonstrative.

6. _____

7. _____Moderate amount of closeness exists over and above that determined by crises: i.e., Warm smiling and touching when giving praise, explaining, helping, etc.

8. _____

9. _____Teacher actively reaches out and encourages closeness and physical contact with children: i.e., lifts them onto her lap, hugs them, perhaps rocks them, etc.

Ratings of Teacher Functioning

Use of Time

Please rate, in terms of percentages, the relative amount of time the teacher spends engaging in each of the following activities.

1. Custodial Care: Time spent fulfilling the children's physical needs, e.g. diapering, feeding, cleaning up children, etc. and engaging in activities related to such care, e.g., preparing snack, cleaning up table after lunch, etc.
   Amount of time spent: ____________________

2. Educational interaction: Time spent by the teacher interacting with the children during which she is teaching them, demonstrating to them, or assisting them in activities. During such times, she is conveying some type of information to the children (or to an individual child). Such demonstrations, explaining something, etc.
   Amount of time spent: ____________________

3. Inactive: This refers to those times when the teacher is not interacting with the children (e.g. preparing an activity, cleaning up, etc.). During such periods, she may be talking with another adult, sitting around, etc.
   Amount of time spent: +____________________

RATINGS OF TEACHER FUNCTIONING

DISTINCTION BETWEEN WORK, ROUTINES AND PLAY: Please rate the extent to which the teacher distinguishes work from play. Routines may be defined as those activities, generally related to body care, which the children must engage in daily, e.g., dresseing, toileting, eating, and resting. Play may be defined as non-routinizes activity.

1. _____Distinguishes always
2. _____
3. _____Distinguishes often
4. _____
5. _____Permits some overlap, or is inconsistent
6. _____
7. _____Permits much overlap
8. _____
9. _____Makes almost no distinction--encourages enjoyment in the service of work and the necessity of daily routines.

RATINGS OF TEACHER FUNCTIONING

CONTROL OF CHILDREN: a) Amount of control--Please rate the amount of control exerted by the teacher, without regard to the nature of control used.

1. _____The teacher issues orders and suggestions which must be followed by the children in virtually all instances. She does not tolerate deviation from her orders.

2. _____

3. _____Orders and suggestions are often issued but are not necessarily coercive.

4. _____

5. _____The teacher is coercive in some matters, but optional suggestions are also used. Some tolerance of deviation from orders.

6. _____

7. _____The teacher tends to avoid the use of coercion wherever possible. She offers suggestions or alternatives as often as possible. She accepts deviation from her orders.

8. _____

9. _____The teacher consistently allows the children a very wide range of free choice. She often suggests things when she feels the child is ready for them, i.e., he has finished an activity, is in a state of transition, is in a state of distressor vacillation.

Ratings of Teacher Functioning

Responsiveness: a) Frequency and immediacy

Please rate the overall frequency and immediacy of the teacher's responsiveness to child-initiated interactions with her, without regard to the nature of the teacher's response. The rating of responsiveness is limited to those teacher responses directed toward satisfying the child's needs (emotional and social as well as physical).

1. _____ Teacher tends to ignore child's attempts at interaction. She rarely responds to the children's overtures. This may result in little interaction or may indicate that it is generally the teacher who initiates interaction.

2. _____

3. _____ Teacher tends to be slow in her reaction to the child's attempts at interaction. Sometimes she does not respond at all to them.

4. _____

5. _____ Teacher is inconsistent in her responses. Sometimes she responds quickly; other times she is slow to respond; still other times, she does not respond at all, but it is rare that she makes no response.

6. _____

7. _____ Teacher generally responds immediately to the children's overtures. It is rare that she is slow to respond or does not respond at all.

8. _____

9. _____ Teacher almost always responds to children immediately. Only situations in which her undivided attention is mandatory prevent her immediate response to a child's overtures.

RATINGS OF TEACHER FUNCTIONING

VERBAL INTERACTION: a) Overall amount of verbal interaction occuring in the classroom.

1. _____Little or no verbal interaction of any form occurring in the room.

2. _____

3. _____Generally little verbal interaction occurring, but during certain periods the amount of verbal interaction seems to increase. Verbal interaction that does occur seems to be brief and tends to fufill a very specific purpose (e.g., direction of the children by the teacher).

4. _____

5. _____Some verbal interchange occurring. It may be that during certain periods (e.g., free play) there is a great deal of verbal interaction while during others (e.g., structured play or lunch) there is virtually none; or, it may be that certain types of verbal interaction occur quite frequently (e.g., teacher to teacher exchanges), but most of the people in the room are not involved.

6. _____

7. _____There is a good deal of verbal interaction going on much of the time between most of the people in the room.

8. _____

9. _____ There is almost constant verbal interaction within the room on all levels (teacher to teacher, teacher and child, child to child).

Appendix B-1

Manual for Administering Trust Situations

for 12 Month-Old Children

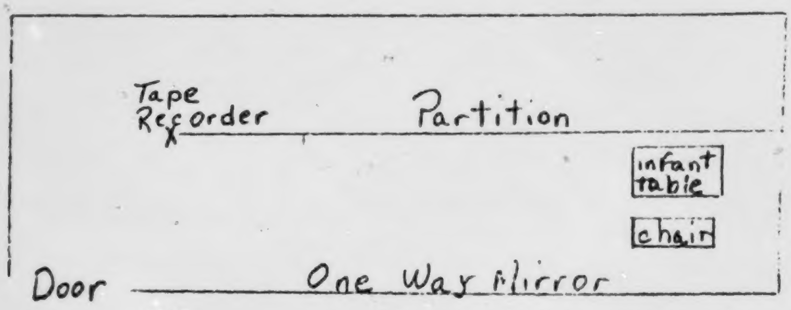
The trust situation is designed to measure how an infant of 12 months reacts to an unfamiliar person and how this compares to his behavior towards a familiar caregiver in the daycare center (FCG). The trust situation occurs in a bare room containing a partition, a chair, and a feeding table. Two experimenters are needed to conduct the test: an observer (E-1) to explain the procedure to the familiar person and to record the infant reactions, and an unfamiliar examiner (E-2) to interact with the infant.

A Brief Synposis

The FCG is contacted and a testing session is arranged. FCG comes to the testing room with the infant and is met by E-1. E-1 explains the procedure that will follow and takes FCG and infant into the experimental room. FCG is seated on the chair holding the infant on her lap. E-1 turns on taped instructions. A series of steps follow, each lasting 20 seconds with several interspersed pauses. (1) E-2 enters room and smiles at infant from 6'; (2) E-2 talks to the infant; (3) E-2 slowly approaches, smiling and greeting the child; (4) E-2 talks and touches the infant's hand; (5) E-2 picks up the baby and walks behind a partition; FCG leaves the room unnoticed; (6) E-2 wiggles the infant in the air; E-2 puts the baby into an infant table; (7) E-2 offers a toy to the infant; (8) E-2 asks the baby for the toy, takes it and leaves; FCG enters and smiles; 9) FCG approaches and touches baby's hand; 10) FCG picks up baby, walks him and puts him into the infant table; 11)FCG picks him up and wiggles the infant in the air; 12)FCG puts the infant back into the infant back into the infant table; 13) FCG offers the baby a toy; 14) FCG leaves the room, waving bye-bye.

Placement of equipment in bare room:

The infant table and FCG's chair should be situated so that E-1 will be able to observe infant's face and body. The partition should be positioned so that when E-2 is behind it, the infant will not be able to see the other depart from the room. E-1 should observe the infant from behind a 1-way vision mirror if possible, otherwise from behind a second partition. A word of caution: if a 1-way vision mirror is available, conceal all parts of mirror not needed to view the infant; infants may find the mirror intriguing, and attention to reflections in mirror will then confuse coding of trust reactions. Below is an illustration of placement of equipment used.



The infant is placed in feeding table during several intervals in the trust session.

Instructions for Recording

Instructions directing both FCG and E-2 for the trust situation are pre-recorded. Each instruction is read clearly; timing for each pause is started immediately after each instruciton is read.

Instructions to the Observer (E-1)

E-1 may be either male or female.

(1). Instructions Pertaining to Interaction with Familiar Caregiver

E-1 greets the FCG when she and the infant arrive in the Testing Room. E-1 then instructs FCG about what she will do, has FCG put on apron with pocket that contains the toy she will give to infant during Trust Session, gets FCG seated in the experimental room with the infant on her lap, turns on tape recorder, and then leaves to begin observing infant.

Instructions to FCG and E-2 during trust session are presented on the tape.

Instructions to the Examiner (E-2)

E-2 will be a woman. E-2 should be stationed behind the partition before the FCG and infant are brought into the meeting room. E-2's clothing should be simple, without bright colors, jewelry, or shiney buttons (to not distract or attract the infant). She should wear an apron with a pocket containing the toy that she will give to infant. Once E-1 turns on the tape recorder, E-2 should follow the taped instructions. When instructions are given, E-2 should pause quietly and smile at infant. During all interactions with infant (except for entrance), E-2 should talk cheerfully to infant. N.B. E-2 must be careful not to stand so that she obscures infant from observer's (E-1's) view.

E-2 will also administer the persistence tasks. Instructions for the persistence task will be found under "Persistence Tasks."

Recorded Instructions

The bably should be seated on FCG's lap. Let us begin.

1.* E-2 comes into the room and stands about 6' in front of the baby. She smiles.

(pause 20")

2. E-2 talks to the baby in a cheerful manner.

(pause 20")

3. E-2 slowly approaches the baby, smiles and says hello.

(pause 20")

4. E-2 continues to talk and touches the baby's hand in a game-like fashion several times.

(pause 20")

5. E-2 picks up the baby and holds him so that his back is towards FCG. E-2 talks and smiles to the baby while walking around the room.

(pause 20")

E-2 walks behind the partition.

(pause 10")

FCG stands up and goes quietly out of the room. Please shut the door.

---

*The numbered sequences are scored by the observer (E-1). (See scoring categories at end of listed sequences.)

6. E-2 returns from behind the partition and cheerfully wiggles the baby in the air up and down several times.

(pause 20")

E-2 holds the baby briefly, then talks and smiles while putting him into the infant table.

(pause 20")

7. E-2 offers the baby a toy. She offers it repeatedly if the baby does not take it within about 10 seconds.

(pause 20")

8. E-2 "asks" the baby for the toy, takes it while talking and smiling and leaves.

(pause 15")

FCG enters the room and stands 6' in front of the baby. She cheerfully talks and smiles.

(pause 20")

9. FCG continues to talk and approaches the baby. She touches his hand in a game-like fashion several times.

(pause 20")

10. FCG picks up the baby and holds him. She walks around the room and talks and smiles while putting him into the infant table.

(pause 30")

11. FCG cheerfully wiggles the baby up and down in the air several times.

(pause 20")

12. FCG holds the baby briefly, then talks and smiles while putting him into the infant table.

(pause 20")

13. FCG offers the toy to the baby. She offers it repeatedly if the baby does not take it within about 10 seconds.

(pause 20")

14. FCG leaves the toy and slowly walks to the door waving bye-bye cheerfully and leaves. The baby is left alone in the room briefly.

(pause 3")

FCG and E-2 return to the room and greet the infant. The trust session is now over.

Role Description: Unfamiliar Adult

The unfamiliar adult is stationed behind the barrier before the mother and infant are brought into the observation room. She wears a drab-colored smock with a pocket containing a toy. After turning on the tape recorder, she simply follows the taped instructions, describing the sequence of events composing the Trust in Unfamiliar Adult. (A few of these events require more detailed descriptions than is provided on the tape; these few specific events are described more fully below.) While listening to each instruction, she pauses quietly and smiles at the infant. During all interactions with the infant (except for the entrance), she talks cheerfully and naturally, being careful not to stand so that she obscures the infant from the observer's view. If, for some reason (e.g., infant crying) the mother does not hear or respond to the taped instructions, the unfamiliar adult should repeat them herself.

The same person (i.e., unfamiliar adult) also administers the persistence tasks. The last item of the Trust in Unfamiliar Adult (for 12-month-old infants only) is given immediately after the Persistence with Objects test. Instructions for this item are given below.

Events in the Trust in Unfamiliar Adult that require more description than is provided on the tape are as follows:

Taped Instructions	Additional Unfamiliar Adult Instructions
"The unfamiliar adult slowly approaches the baby, smiles and says hello."	The unfamiliar adult approaches to within 2 feet of the baby and squats in front of him in order to be at about eye level. The unfamiliar adult continues to talk and smile.
"The unfamiliar adult continues to talk and pats the baby's fingers in a game-like fashion several times."	The unfamiliar adult slowly strokes the back of the baby's hand, switching to the other hand after a little while. The baby's hand is stroked rather than tapped or pecked at. The movement is slow

	in order to give the baby a chance to grasp the unfamiliar adult's hand if he is so inclined.
"The unfamiliar adult picks the baby up and holds him so that his back is towards his mother. She talks and smiles while walking around the room."	The unfamiliar adult walks sideways (from side to side) while keeping the infant's back to his mother so that he must arch away from the unfamiliar adult in order to see his mother.
"The unfamiliar adult cheerfully wiggles the baby in the air up and down several times."	Depending on the baby's weight, the unfamiliar adult should wiggle him overhead or more at shoulder level. The wiggle or jiggle action should be fairly gentle, rolling the baby rather than jerking him.
"The unfamiliar adult continues to talk and puts the baby into the infant table.."	If the baby assumes a seated position, there is no problem. If the infant remains standing, the unfamiliar adult should reach under the infant table with one hand (her other hand should support the baby) and pull the baby's legs down and out towards the "leg holes" in the feeding table.
"The unfamiliar adult offers the baby a toy. She offers it repeatedly if the baby does not take it within about 10 seconds."	The unfamiliar adult holds the toy in front of the infant within easy reach. If the infant does not take it at once, the stranger waits a few seconds, then jiggles the toy to make it more attractive.
"The unfamiliar adult 'asks' the baby for the toy, takes it while talking and smiling and leaves."	If the baby is upset, and especially if he is trying to climb out of the infant table, the unfamiliar adult should stay near the baby until the mother enters. If necessary just before leaving, the unfamiliar adult should adjust the baby's legs from under the infant table so that he becomes seated again.

The caregiver is not given a comparable set of detailed instructions. However, the caregiver watches the unfamiliar adult model the appropriate behaviors.

Once the Trust in Unfamiliar Adult begins, it should proceed uninterrupted. If the infant should become upset, both the unfamiliar adult and the mother can adopt a soothing, gentle manner during the specified interactions with him. Diapering, feeding, additional comforting can be done upon completion of the Trust situation.

The twelve-month-old co-operative play item is administered after the twelve-month-old infant completes the Persistence with Objects tests. The unfamiliar adult demonstrates the playing of a xylophone to the infant and offers him the stick saying "You play it." If the infant takes the stick and plays the xylophone, the unfamiliar adult waits for 10 seconds (approximately) and then puts her hand right next to the xylophone as if ready to take the stick and play the xylophone again herself; the unfamiliar adult does not ask the infant for the xylophone stick, she only gestures. This is repeated several times if possible.

Instructions Pertaining to Coding the Trust Situation

Only behavior following the taped instructions is coded. Each coding interval is initiated by the completion of an instruction and is terminated by the beginning of the next instruction. Behavior is coded during the "timeout" period provided by the recorded instructions. All intervals are coded except for transition intervals. Both the positive and the negative subscales of each scale are coded. Score the most extreme positive and negative behavior observed. However, when in doubt about how extreme a particular behavior is, code conservatively (e.g., a -2 or +2 instead of a -3 or +3 respectively). The actual coding sheet for the trust situation follows:

OBSERVATION CATEGORIES FOR CODING
TRUST SITUATION SEQUENCES

Scale 1: Looking

_____0 fleeting or no look at E

_____+1 1 or 2 brief looks (off and on) at E

_____+2 looks half of the time at E (steadily or off and on)

_____+3 looks most of the time at E

_____0 fleeting or no look at FCG

_____-1 1 or 2 brief looks (off and on) at FCG

_____-2 looks half of the time at FCG (steadily or off and on)

_____-3 looks most of time at FCG

Scale 2: Affect

_____0 no positive affect

_____+1 brief smiles

_____+2 frequent smiles

_____+3 laughs, excited, wiggles with delight

_____0 no negative affect

_____-1 sobers or silent cry face, brief fret

_____-2 frets, whines, stiffens body, or brief cry

_____-3 more than brief cry or scream

Scale 3: Postural Adjustment

_____0 no postural approach

_____+1 briefly leans towards and looks, or eventually allows E to touch hand

_____+2 briefly reaches or gestures, or allows E to touch hand on first time

_____+3 steadily reaches towards or pushes up towards E (with effort), or reaches for, touches E's hand

_____0 no postural avoidance

_____-1 coy avoidance, "shy" (i.e., peeks at E), or removes hand when touched once or twice; yawns, rubs eyes, scratches self

_____-2 leans at least briefly away with clear eye aversion (may turn head briefly), or removes hand when touched 3 or more times

_____-3 usually averts body and/or head or always jerks hand away when touched

Ground Rules for Testing Session

1. Child is to be scheduled at a time determined by mother to be best, hunger and sleepwise.

2. Mother must be given details of what to expect prior to the session either by phone or home visit. Child should not overhear these details.

3. Mother and child are to be met and welcomed on test day in friendly manner and should not have a long wait prior to testing.

4. The testing room must be void of all material distractions and people other than the one coder who will be behind a one-way mirror.

5. The examiner should dress in simple, ordinary looking clothes with as few distractions (i.e., jewelry, strange styles) as possible. A plain smock with pockets should be worn over the clothing.

6. Mother is to be reassured that her behavior will not be coded.

7. The mother will be present during testing. She will initially be told to relax and behave in her customary manner towards her child. However, if her behavior interferes with the testing, the E. may ask her to not do that thing at that time. She should not be made nervous or tense with many rules beforehand as her tension will reflect to the child.

8. At the end of the testing session (before Persistence) ask the mother to perform the board-walking task with the child.

Appendix E-2

Manual for Administering Trust Tasks to 24-Month-Old Children

Immediate Response to New Person

E. enters room shortly after coder has taken M. & C. to the testing room and shown M. to a seat. E. enters with a friendly warm introduction. (See instructions for arrival.) The coder will rate the child's reaction to E.'s entrance and introduction.

A. Affective Reaction to Introduction. (Code both positive and negative. Make two ratings.)

______ 0 no positive affect
______+1 brief smiles or positive vocalization
______+2 frequent smiles
______+3 laughs, excited

______ 0 no negative affect
______-1 sad or silent cry face or negative vocalizations
______-2 frets, whines, stiffens body
______-3 more than brief cry

B. Tension Displayed during Introduction.

______1. Has bounce, eager
______2. Body has tone and is generally relaxed.
______3. Becomes tense at times although body has relaxed quality; subsequent quick return to supple, relaxed condition.
______4. Inert; may be flaccid rest of the time, passive.
______5. Body is tense more than half the time; may be stiff or tight in one or more areas; startles; quivers or trembles easily.
______6. Body is predominantly taut or tense, resistant.

C. Rating of Behaviors

______1. Approaches E, does not look back at mother.
______2. Approaches E but refers back to mother once or twice.
______3. Tentatively approaches E, hesitant.
______4. Stands away from E, watches with interest.
______5. Stands away from E, watches warily.
______6. Clings to M. or aversion to E.

2. Delayed Response to New Person

E. takes the Griffith's 2-circle formboard to a table following the introduction and sits down, placing the toy on the table. (The table must be approximately 3 feet high so the child cannot readily see the game.) E. plays noisily with the forms for a full minute, talking to herself about the fun she is having and how tricky it is to get the circle to fit in the hole. E. watches the game, not the C. The coder will record C's reactions to what E. is doing during the minute.

A. Ratings of Affect. (Code both positive and negative.)

______ 0 no positive affect
__✓__ +1 brief smile or positive vocalization
______ +2 frequent smiles
______ +3 laughs, excited

__✓__ 0 no negative affect
______ -1 sad, silent cry face, or negative vocalization
______ -2 frets, whines, stiffens body
______ -3 more than brief cry

B. Ratings of Tension

______ 1. Has bounce, eager.
______ 2. Has tone-relaxed
______ 3. Some tenseness--returns to relaxed quickly
______ 4. Inert, flaccid, passive.
______ 5. Tense more than 1/2 time.
______ 6. Taut or tense, resistant.

C. Ratings of Behaviors

______ 1. Approaches E, does not look back at mother.
______ 2. Approaches E but refers back to mother once or twice.
______ 3. Tentatively approaches E, hesitant.
______ 4. Stands away from E, watches with interest.
______ 5. Stands away from E, watches warily.
______ 6. Clings to M. or aversion to E.

3. Approach to New Person

E. invites C. to come over to table and see the toy that she has. E. gives three invitations. If C. seems unwilling after 3 invitations, E. will ask the M. to come over and see the toy and bring C. with her. (This is both a trust situation to rate and an opportunity for E. to establish whatever rapport she can.) E. talks to C. and tries to get him involved for one minute after C. approaches the table and toy. E. may change toy if C. not interested in form board. Alternate toy is the Griffith's little barrel (open screw toy).

A. Reaction to E's Invitation to Come and See the Toy.

______ 1. Approaches readily at first suggestion from E.
______ 2. Approaches hesitantly at second suggestion from E.
______ 3. Approaches after mother's suggestion.
______ 4. Approaches readily with mother accompanying.
______ 5. Approaches reluctantly with mother accompanying.
______ 6. Refuses altogether.

B. Affect on Approach

______ 0 no positive affect
______ +1 brief smile or positive vocalization
______ +2 frequent smiles
______ +3 laughs, excited

______ 0 no negative affect
______ -1 sad or silent cry face or negative vocalization
______ -2 frets, whines, stiffens body
______ -3 more than brief cry

C. Body Tension During Approach

______ 1. Has bounce, eager.
______ 2. Has tone-relaxed
______ 3. Some tenseness--returns to relaxed
______ 4. Inert, flaccid, passive.
______ 5. Tense more than 1/2 time
______ 6. Taut or tense predominantly, resistant.

D. Interest in Toy

______ 1. High interest in form board, seeks to see better.
______ 2. Some interest in toy.
______ 3. No interest in toy.
______ 4. High interest in 2nd toy, seeks to see better.
______ 5. Some interest in 2nd toy.
______ 6. No interest in either toy.

4. Invitation to Lapsitting

After 1 minute of building trust and interacting with a game, E. tells C. that she is going to put C. up on her lap so he can play the game better. She makes a point of showing him that the game doesn't work very well holding it down at his level. So she puts it up on the table and puts her arms around him to pick him up. The coder will rate C's behavior, affect and tension in this episode just prior to being on the lap, but after the C. knows that E. wants him on her lap. E. must maintain a positive affect and a flow of conversation to make the pick-up seem normal, necessary, and fun, not a test. E. must try not to be tense about picking up C., or C. may sense the tension. E. says "I'm going to put you up on my lap" and then E. pauses 5 seconds before doing so.

A. Behavior during Invitation to Lapsitting.

______1. Lifts arms to be picked up immediately or moves toward E.
______2. Hesitates and then moves toward E.
______3. Moves toward E. with encouragement from mother.
______4. Stands immobile, no response.
______5. Stands immobile; cries or indicates his unwillingness.
______6. Retreats to M's lap or arms fearfully.

B. Affect during Invitation to Lapsitting Task.

______ 0 no positive affect
______+1 brief smile or positive vocalization
______+2 frequent smiles
______+3 laughs, excited

______ 0 no negative affect
______-1 sad, silent cry face, or negative vocalization
______-2 frets, whines, stiffens body
______-3 more than brief cry

C. Body tension during invitation to lapsitting task

______1. Has bounce, eager.
______2. Has tone-relaxed
______3. Some tenseness--returns to relaxed
______4. Inert, flaccid, passive.
______5. Tense more than 1/2 time
______6. Taut or tense predominantly, resistant.

5. Reaction to Being Taken to New Room

This task is introduced regardless of the results of the lapsitting task. E. lets C. play with the form board for a minute then E. tells C. that there is another nicer formboard (set of barrels) in the next room. E. then invites C. to come with her to the next room to get the toy and bring it back. E. extends hand for C. to hold but does not grab C's hand or in any way insist on hand-holding beyond offering the hand.

A. Reaction to E's Suggestions and to Accompanying Her to New Room

______1. Accepts first suggestion.
______2. " second "
______3. " third "
______4. Accepts with mother's intervention.
______5. Accompanies E. reluctantly after mother's intervention.
______6. Refuses altogether.

B. Affect on Way to Room

______ 0 no positive affect
______+1 brief smile or positive vocalization
______+2 frequent smiles
______+3 laughs, excited

______ 0 no negative affect
______-1 sad, silent cry face, or negative vocalization
______-2 frets, whines, stiffens body
______-3 more than brief cry

C. Body Tension to Way to Room

______1. Has bounce, eager
______2. Has tone-relaxed
______3. Some tenseness--returns to relaxed
______4. Inert, Flaccid, passive
______5. Tense more than 1/2 time
______6. Taut or tense predominantly, resistant.

6. Reaction to E. During Play with New Toy

When E. and C. return from outer room with new toy, E. suggests warmly that they sit on the floor to play, and then sits. (If C. refused to accompany E. out of room for toy, E. went for it alone and now shows it to C. and proceeds.) E. manipulates the new form board (or barrel) and tries to involve C. in play for another full minute. If C. is involved, the play should be terminated gradually with the introduction of the next task. The coder rates C's reactions to E. during this second one-minute interval of play.

A. Behavior during play with new toy.

______1. Gets into position to play immediately.
______2. Positions near E. but does not immediately begin play.
______3. Watches with interest.
______4. Stands immobile; does not attempt to involve self with toy.
______5. Approaches toy only after encouragement from mother.
______6. Vocalizes refusal or retreats from situation.

B. Affect during Play with New Toy

______ 0 no positive affect
______+1 brief smile or positive vocalization
______+2 frequent smiles
______+3 laughs, excited

______ 0 no negative affect
______-1 sad, silent cry face, or negative vocalization
______-2 frets, whines, stiffens body
______-3 more than brief cry

C. Body Tension during Play with New Toy

______1. Has bounce, eager
______2. Has tone-relaxed
______3. Some tenseness--returns to relaxed
______4. Inert, flaccid, passive
______5. Tense more than 1/2 time
______6. Taut or tense predominantly, resistant

7. Reaction to Ball-Rolling Game

E. picks up the circular form from the formboard (or the barrel if this is toy being used) and rolls it to C. She quickly removes the rest of the formboard to the table out of sight. She warmly encourages C. to retrieve the form (or barrel) and roll it back to her. She takes the form (or barrel) when C. rolls it back (or retrieves it herself if C. doesn't) and substitutes a rubber ball. She then proceeds to involve C. in a game of rolling the ball back and forth. She encourages and praises any attempts C. makes to interact in this shared activity.

A. Reaction to Ball-Rolling Game

______ 1. Gets into position and tries to return form, then ball.
______ 2. Sits to play but does not return rolled object at once.
______ 3. Returns ball after several suggestions.
______ 4. Sits only after mother intervenes.
______ 5. Rolls ball only after mother intervenes.
______ 6. Will not sit or take part in any way.

B. Affect during Ball-Rolling Game

______ 0 no positive affect
______ +1 brief smile or positive vocalization
______ +2 frequent smiles
______ +3 laughs, excited

______ 0 no negative affect
______ -1 sad, silent cry face, or negative vocalization
______ -2 frets, whines, stiffens body
______ -3 more than brief cry

C. Body Tension during Ball-Rolling Game

______ 1. Has bounce, eager
______ 2. Has tone-relaxed
______ 3. Some tenseness-returns to relaxed
______ 4. Inert, flaccid, passive
______ 5. Tense more than 1/2 time
______ 6. Taut or Tense predominantly, resistant.

8. Rolling Ball on Board

E. gets up off the floor and suggests to C. that they try a new method and see if they can roll the ball on a board which is set up in the room. E. demonstrates, then gives the ball to C. to try. (The board is 1 foot wide and 3 feet off the floor and raised on a support which will bear the weight of E. as well as C. for the task #10) E. may demonstrate the ball-rolling on board a second time if C. hesitates to try. E. pursues this task trying to involve C. in the shared activity for approximately 1 minute.

A. Reaction to Rolling Ball on Board

______ 1. Tries immediately to roll ball on board.
______ 2. Requests E. to do it again.
______ 3. Tries task after second encouragement from E.
______ 4. Tries task after encouragement from M.
______ 5. Watches E. but does not participate.
______ 6. Refuses altogether, retreats from board.

B. Affect during Board Rolling Task

______ 0 no positive affect
______ +1 brief smile or positive vocalization
______ +2 frequent smiles
______ +3 laughs, excited

______ 0 no negative affect
______ -1 sad, silent cry face or negative vocalization
______ -2 frets, whines, stiffens body
______ -3 more than brief cry

C. Body Tension during Board Rolling Task

______ 1. Has bounce, eager
______ 2. Has tone-relaxed
______ 3. Some tenseness-returns to relaxed
______ 4. Inert, flaccid, passive.
______ 5. Tense more than 1/2 time
______ 6. Taut or tense predominantly, resistant.

9. Walking the Board

E. takes C's hand and instructs him and helps him to step up on a small board. The board is placed on two bricks which lifts it 4 inches from the floor. The board should be 12 inches wide and at least 3 feet long. Holding C's hand E. instructs him to walk down the board, giving reassurances that she will not let go of his hand. She tells him to step before he reaches the end of the board.

A. Behavior during Board-walking Task

______1. Walks down board in a relaxed manner
______2. Momentarily immobile. Walks down board slowly and hesitates periodically.
______3. Must be encouraged to walk on board, stops frequently
______4. Stands immobile on board
______5. Verbally rejects task
______6. Gets off board, physically and verbally rejects task.

B. Hand holding during Board-walking Task

______1. Accepts first suggestion to hold hand
______2. Accepts second suggestion to hold hand
______3. Accepts third suggestion to hold hand
______4. Accepts with mother's intervention to hold hand
______5. Holds hand reluctantly after intervention
______6. Refuses altogether to hold hand

C. Affect during Board-walking Task

______ 0 no positive affect
______+1 brief smile or positive vocalization
______+2 frequent smiles
______+3 laughs, excited

______ 0 no negative affect
______-1 sad, silent cry face, or negative vocalization
______-2 frets, whines, stiffens body
______-3 more than brief cry

D. Body tension during Board-walking Task

______1. Has bounce, eager
______2. Has tone-relaxed
______3. Some tenseness-returns to relaxed
______4. Inert, flaccide, passive
______5. Tense more than 1/2 time
______6. Taut or tense predominantly, resistant.

Appendix -3 Manual for Administering Trust Tasks to 36 and 48-Month-Old Children

A brief synopsis:

The Trust situation is designed to measure how a 36 month old child reacts to an unfamiliar person and how this compares to his behavior towards a familiar person (mother, if the child is not in day care; caregiver if the child is in day care) in a few select situations.

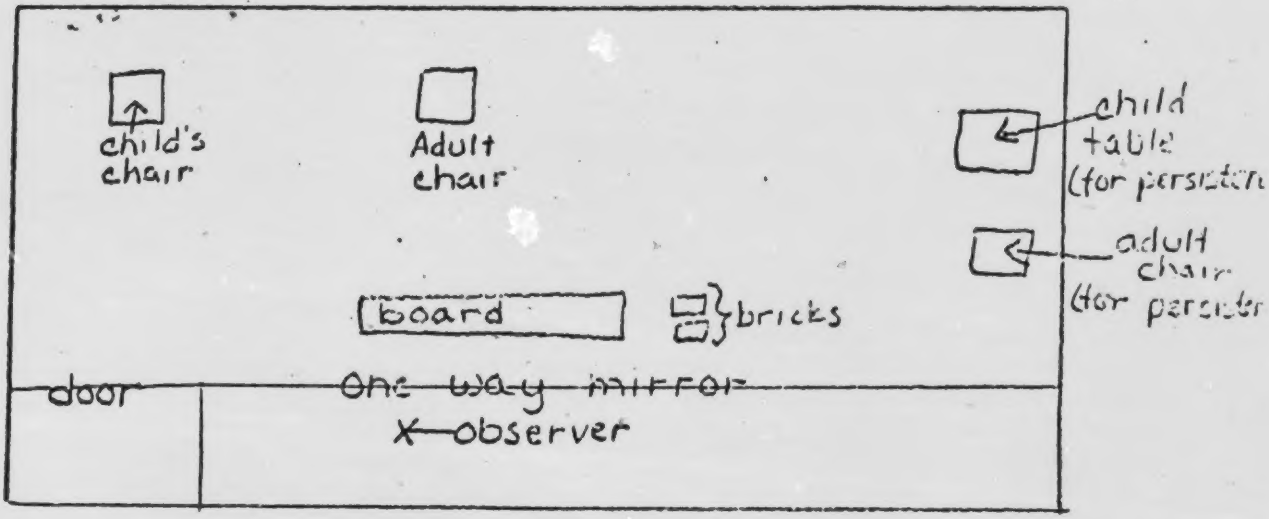
The procedure, briefly, is as follows: The unfamiliar person(UP) enters a room where the familiar person (FP) and the child are waiting, introduces herself, gives the child a toy to play with, and seats herself next to the child. After about two minutes, the UP asks the child to accompany her (without the FP) to play some games in a different room. Once there, the UP asks the child to play a toe-touching game and an imitation of body movement game, to sit on her lap, to be blindfolded, to walk on a wooden plank blindfolded, and to jump from a chair into her arms. The UP and the child then call the FP, who enters the room. The UP then asks the FP to blindfold the child, to have the child walk down the plank, and to have the child jump from a chair into her arms. The Persistence test is then administered.

Equipment:

The following equipment is needed:

1 child's toy (e.g., an airplane)
1 blindfold
1 wooden board (about 12" x 40" x 3/4")
2 cardboard bricks (about 6" high)
1 adult-size chair
1 child-size chair
1 one-way mirror (or some form of observation booth)
1 solid color smock with a pocket

The testing room should contain an adult-sized chair and a child-sized chair positioned about 3 feet apart, the wooden board, and the cardboard bricks (to be used in constructing the walking board). We also place a child-sized table and another adult chair in the room, for use during the persistence testing. The following is an illustration of the suggested room arrangement.


child's chair
Adult chair
child table (for persisten
adult chair (for persist
board
bricks
door
one way mirror
X observer

The UP should wear a smock with pockets to keep the blindfold in. The observer should be seated behind a one-way vision mirror.

Description of trust situations:

The words given in the UP's speech are only examples. They may be altered somewhat to make the situations seem more natural. THE CHILD IS NOT TO BE FORCED TO PARTICIPATE AT ANY TIME.

1. Immediate Response to New Person

The unfamiliar person (UP) enters the waiting room where the familiar person (FP) and child (C) are seated. She introduces herself and gives C a toy to play with. She records C's affect and tension reactions to the introduction (see coding form). The episode last about 2 minutes. During this time, UP does not initiate interaction with C, but she may respond naturally to any contact C may make.

Example of UP's Speech

(To FP) "Hi Ms. ________________. My name is ________. I'm really glad that you could come today. What is your child's name?" (To C) "Hi _____, in a little while I'm going to ask you to go to another room with me and play some games. Right now, here's a toy for you to play with." (To FP) Brief explanation of procedures. "I'll sit over here, and the two of you make yourself comfortable while I finish this work."

2. Reaction to Being Taken to New Room

UP initiates contact with C after 2 minutes, being sure she has his attention by calling his name first. She pauses 5 seconds and if C does not respond she asks C if he is ready. If C still does not respond she waits until he is not involved with any object or with FP and tells him again it is time to go to a new room. If C refuses 3 times, have FP explain to C that he should go with UP for awhile. UP takes the toy from C and puts it in her smock pocket.

"________, it's time to go with me now. I have some great toys for you to play with in the next room. ________ will wait here for us. Are you ready to go now? O.K., let's go.

Proceed to room. Offer hand, but do not insist. Tell C a little more about the destination; for example, "We're going just a little way down down the hall here to a special room." Respond naturally to C's questions and statements, but avoid any excessive interaction, especially of the buddy-buddy nature. Once in the testing room, UP quickly codes C's affect, body tension, and willingness to accompany her (see coding form). UP then puts away her coding form and proceeds with the warm up task.

3. Warm-up Toe Touching Task

UP introduces C to the fact that they have arrived at the special room and are ready to start playing games. She allows C to explore the room briefly, if he wishes. She then begins by banging on the floor and then reaches for the ceiling in an exaggerated manner. After demonstrating, she stops, and invites C to imitate her. UP encourages C to bang the floor and reach for the ceiling, amking every effort to make this activity pleasureable for C. As always, however, she does not force C to participate.

Example of UP's Speech

"This is the room we will play in. You may look around if you want to."
"Now, let's play some games together. Look what I can do. I can bang on the floor and almost touch the ceiling. Let's see you try it."

"Let's both do it."
"Come on, ____, let's try it."

4. Rocking task - alone

UP introduces the second game and demonstrates rocking, which is done with the feet slightly spread and stationary on the floor and a sway from side to side, "rock-rock" being counted as 1 rock cycle. UP demonstrates 4 rock cycles, facing C at a distance of about 3 feet. She then asks C to join her in rocking. She rocks 4 more times saying "rock-rock" then 8 more times silently. Each time the child moves his body from vertical (rocks discernibly) it is counted as rocking.

"Now, _______, we're going to play another game. This one's a little harder, so watch me, O.K.? Can you rock like this? Rock-rock, rock-rock, rock-rock, rock-rock."

"Now you rock when I do, O.K.? Do it like I do. Rock-rock, rock-rock, rock-rock, rock-rock."

5. Rocking Task—Holding UP's Hands

After completing the 8 silent rocks, UP extends her hands, palms upward, and invites C to hold her hands for rocking. If no response, in 5 seconds she repeats the invitation. If no response, to the second invitation she moves her hands towards the C's hands (don't grab) and gives a third invitation while holding hands. She verbalizes "rock-rock" 4 times as she begins rocking, then again rocks 8 times silently while holding C's hands. Again, may encourage by saying, "That's very good."

UP's Speech

"O.K/, now I want you to hold my hands so we can rock together."

"Will you hold my hands so we can rock together?"

"See, we can hold hands while we rock together. Now you rock when I do. Do it just the same as I do. Rock-rock, rock-rock, rock-rock, rock-rock."

6. Lapsitting

After completing the 12 rocks holding hands, UP drops C's hands and moves over to a straight-back chair and sits down. Next to this chair is a small chair. This should be approximately 3 ft. from the UP's chair. UP extends her arms to C and asks C to come and sit on her lap. However, UP should not grab C in order to establish physical contact unless C gives clear behavioral cuess that such contact is desired. If C doesn't come in 5 seconds, UP repeats the invitation. If after another 5 seconds C has still not come, UP invites C to sit in the child's chair instead. If after another 5 seconds C has not come to the chair, UP tells C to take the chair to where he'd like to sit.

UP's Speech

"Will you come and sit in my lap?"

"I know you don't know me very well, but I'd really like you to sit in my lap."

"If you won't sit in my lap will you sit here in this chair?"

"Then move the chair to where you'd rather sit."

7. Blindfolding

UP stands up and takes a blindfold out of her pocket. UP explains that she is going to put the blindfold over C's eyes. UP may try 3 times to blindfold C, but should not engage in prolonged coaching.

UP's Speech

"O.K., now I want you to play another game."

For this game you have to wear this special mask. It feels soft. See? You won't be able to see when I put it on you, but I'll be right here. You may hold onto me if you'd like."

8. Walking the Board

UP directs C to the walking board, which has been constructed from the board and the two cardboard bricks. C's blindfold is still in place. UP holds C's hand and instructs him to walk down the board. UP tells C to stop before he reaches the end of the board and helps him to get down. UP should not demonstrate the board walking.

Example of UP's Speech

"Now, _____, I'd like you to walk on the bridge."
"I'll hold your hand. Now, put your foot up on the bridge and walk. I'll tell you when to stop."
"O.K., stop. Now, step down."

9. Jumping task

UP asks C if he knows how to jump. She picks him up and places him on a straight-back chair. She steps back about 2 feet from the chair and encourages C to jump into her arms. If C does not jump after 3 invitations spaced at 3 second intervals, UP waits 5 seconds, then lifts him down (if he has not already climbed down by himself)

"Do you know how to jump? Here, I'm going to let you stand on my chair and see if you can jump."
"Jump to me. Jump into my arms. I'll catch you."

10. Reunion with familiar person

UP tells C that the FP should come in UP encourages C to call FP.

"O.K., let's go get Ms._______ now. Come on, you call her."

Repeat blindfolding (#7), board-walking (#8), and jumping (#9) with FP replacing UP. UP should instruct FP what to do for each of the tasks, emphasizing that the child should not be forced to do anything which he does not want to do.

Coding Instructions:

The unfamiliar person is responsible for coding reactions in intervals 1 & 2. The observer, who is seated behind a one-way vision mirror, is responsible for coding all of the other intervals (except interval 3 which is not scored). Both the positive and the negative subscales of the Affect Scale are to be coded. A single judgement is coded in all other scales. Frequently behavior occurs that is not completely described by the scale. When this happens, the observer should choose the most appropriate scale point interpreting "1" as being the most positive response and "6" as being the most negative.

Appendix E-4

Training Manual for Administering Persistence Task to 12-Month-Old Children

The persistence situations are designed to immediately follow the trust procedures. The series of five situations presented to the 6 month old children will differ from that presented to 12 month old children. The situations are to be presented in a fixed order. The total sequence lasts about one-half hour.

Although the mother should have already been informed about the persistence proceedings, the E should remind the mother before beginning the persistence sequence that we are interested in seeing how the baby plays with toys and that she should not give the child assistance or encouragement (e.g., suggestions what to do with the toys, bringing the child's attention back to the task when he is distracted, praise, etc.) Also, E should remind her that if the child becomes upset during the situations, the testing will be interrupted so that she can comfort him.

Room arrangement:

The room arrangement will be essentially the same as that used for the trust procedures. The E should place her equipment so that it is out of the infant's sight.

The mother is seated on the chair provided for her, holding the infant on her lap.

PROCEDURES:

(1)E sits to one side of the table for all tasks, allowing the observer clear view of the child's behavior.

(2)The E does not initiate any social contacts or conversation with C. If C turns to E and vocalizes, hands E the toy, etc. E should make her response as brief as possible.

(3)E generally assumes an attitude that will not call attention to herself.

(4)Verbal statements introducing each task are standard and are to be used verbatim.

(5)For each task, timed observation begins after E presents the Task to the child, i.e., immediately upon E's release of the material. In the case of the Receptive Looking and Listening tasks, timing begins immediately upon E's opening of the story book. E should let the task continue for 15 seconds (i.e. one interval) beyond the allotted time. This is to allow for the possiblity that E and O are not in exact time synchronization.

(5)As has been mentioned, the child is seated on the mother's lap. If the child is very restless and wants to get down, he should be allowed to sit or stand on the floor or walk around. C may sit on the table, but for his own safety he should not crawl around on it. However, the child begins each new situation seated on the mother's lap.

(6)Indicators of need for a rest period between situations are: (as checked on sampling sheet) 30 seconds of high negative affect, 30 seconds of emotional dependence, or 30 seconds of psychological or physical withdrawal). The mother should be consulted as to when to stop and when to start again.

(7)If 30 seconds of fussing or 10 seconds of crying occurs during the situation, the situation is interrupted to console the child. The situation is resumed after the child is calmed. The mother should be encouraged to interact freely and naturally during these periods of consolation. She should not pressure the child to return to the task, although she may encourage him to do so. If 30 seconds of fussing or 10 seconds of crying occurs again, the task is terminated. The child is again consoled and a new situation is introduced.

(8)If diapering or hunger is indicated, i.e. the mother or the child indicates discomfort, then the child may be diapersed or fed between tasks.

(9)The experimenter should attempt to keep all equipment on the table at all times, e.g., if the child throws the blocks off the table, the experimenter should retrieve them and place them on the table.

(10)The experimenter will have two sets of test materials in order that toys may be washed between seperate tests.

(11)If the child is reluctant to give up one of the toys, allow him to continue to play with it briefly. M and E may interact with the child during such periods. While he is playing with his toy, attempt to interest him in the next toy. When E thinks the child is becoming interested in the new toy she should gently and quickly remove the old toy and immediatly introduce the next task.

(12)Between tasks, E may say to the child "Did you like that? Now I have another toy for you." Then, proceed to the next task as described in this manual. E should not interact freely with the child between tasks. She should avoid praising him. She should also avoid mentioning the difficulty of the tasks.

(13)If the child knocks the materials out of his reach (but they are still on the table) during play, E may move the materials so that they are within the child's reach. If they fall, she should pick them up and replace them on the table within the child's reach. When moving or replacing the toys so that the child can reach them, E should be as unobtrusive as possible. She should not, for example, tap the blocks on the table, call the child's name, or do anything else that will call the child's attention to her activity.

Each task has a goal, defined by the E. The child will have to overcome obstacles to reach each goal.

The following pages list some possible behaviors for each task. The behaviors that are directed toward the E's goal are listed under "E's Goal". The child may show interest in the objects and orientation towards a task of his own. Some of these behaviors are listed under "C's Goal." The child may in fact show other behavior in addition to those listed.(All behaviors involving the presented materials other than those listed as E's Goal should be scored C's Goal.)

In presenting each task, E should show the child the next toy before removing the one he is playing with. No toys, food, etc., other than the materials for the task the child is working on should be on the table or in the child's hands, mouth, or lap.

V. Toy in Transparent Jar

TWELVE MONTH OLD TASKS

I. Nesting Cups

E's Goal: nests set of cups
takes set of cups out of nesting formation

C's Goal: visually inspects without touching them
picks up cups
transfers cups from hand to hand
bangs cups against table
mouths cups
pushes cup with hand or arm
waves cups
shakes cups
turns cups over
drops cups purposively
throws cups
hands cups to M or E
vocalizes in response to cup
shows cup to M or E

II. Receptive Looking and Listening

E's Goal: fixates eyes on pictures
fixates eyes when E points to pictures
fixates eyes on E
points to pictures

C's Goal: tries to reach book

III. Retrieving Toy from Plastic Bag

E's Goal: attempts to untie yarn
takes telephone out of bag
attempts to tear bag
attempts to get telephone out of bag by dumping or shaking bag

C's Goal: visually inspects toy in bag without touching it
manipulates bag

manipulates string
mouthes
pats
touches telephone through bag
turns toy in bag over
drops toy in bag
pushes toy in bag on floor

Phone removed half-way from bag by E

E's Goal: pulls phone from bag
pushes bag off phone
dumps phone from bag

C's Goal: visually inspects phone without touching it
pats phone
pushes phone away

After the phone is completely out of the bag, all behavior will be rated as C's goal, as we did not give the child any suggestions what to do with the phone.

IV. Building Tower with Blocks

E's Goal: builds tower
makes train with blocks on table

C's Goal: picks up one or more blocks
transfers blocks from hand to hand
visually inspects blocks without touching them
bangs blocks on table
mouths blocks
pats blocks
waves blocks
shakes blocks
turns block over
pushes blocks
vocalizes in response to blocks

V. Toy in Transparent

E's Goal: attempts to remove or break down barrier e.g., hitting, biting, pushing

C's Goal: visually inspects without touching
pats cardboard around cup
vocalizes in response to toy

12 Month Structured Situation I

Nesting Cups

Equipment: 2 sets of six plastic nesting cups

With child seated on his mother's lap at a low table, present the four largest nesting cups to the child. Show them to the child assembled, saying "Look,______, see what I have." Take them apart saying "See, they come apart." Reassemble them saying,"And they go back together." Take them apart again, leaving them within the child's reach saying "And they come apart again. Now you play with them." Begin sampling child's behavior after presenting the unassembled blocks.

If the child immediately puts the nesting blocks together successfully, place (without vocalization)the next smallest block on the table beside the others. If the child nests the new block, present the smallest block to him. If the child nests this block, go to the complimentary set of six nesting blocks. Present first two blocks, unassembled, to the child and then continue presenting them silently one at a time as long as he continues to nest them. Duration of task: seven minutes

12 Month Structured Situation II

Receptive Looking and Listening

Equipment: One attractive, large picture book

Child is seated on mother's lap or at a low table. Experimenter presents the picture book to the child holding the book well out of the child's reach(one yard), saying "Look,________, see the pretty book I have. See, __________, it has locss of pretty pictures." E proceeds to open the book to the first page and point out the picture, giving a brief verbal description. E will not imitate sounds such as animals, trains, cars, etc. E will turn the page about once every ten seconds giving a brief verbal description and pointing to the picture on each page.

Duration of task: two minutes

12 Month Structured Situation III

Retrieving toy from plastic bag

Equipment: One plastic telephone; one duplicate plastic telephone which has been tied tightly in a plastic bag. The tie will be made of heavy yarn.

Child is seated on the mother's lap at a small table. Experimenter presents the telephone to the child to play with. The experimenter does not say anything or give the child any suggestion about the toy. The child is allowed to play with the phone for one minute.

After one minute of play, the child is distracted(E may call to the child, M may call to the child,etc.) and the phone is replaced by a different phone which is inside of a plastic bag. As E places the phone on the table she says, "Look_______, can you get the phone out of the bag?" The child's behavior is then sampled for five minutes.

After the five minute period, E will remove the tie from the bag and remove the phone half-way saying "Look,__________. Here is the phone." The child's behavior is then sampled for another minute.

If the child gets the phone out of the bag at any time, he is allowed to play with the phone for the remainder of the task time.

Duration of task: 7 minutes

12 Month Structured Situation IV

Building a Tower With Blocks

Equipment: Set of 8 multi-colored one inch blocks

Child is seated on the mother's lap at a low table. Present four of the colored blocks, saying "Look at what I have ________. See the blocks." Demonstrate for the child how the four blocks can be stacked, one on top of another, to build a tower, saying "Look, _______, see what I can do with the blocks. I can build a tower." If the child spontaneously demolishes the tower, attempt to reconstruct it, saying "See, _______, I can build the tower again." Leave the tower standing(if he demolishes it, however, do not rebuild it), offer him another set of four blocks and say "_______, can you build a tower?"

If the child does not make any attempt to demolish the tower (after E's first construction), take it apart block by block saying "See I can take the tower down" and then rebuild it saying "And I can build the tower again." Then continue as above. Begin timing after saying "__________, can you build the tower?"

Duration of task: five minutes

12 Month Structured Situation V

Toy Under Jar

Equipment: 1 small toy inside a clear jar whose lid is affixed to a board.

Child is seated on mother's lap. E presents the toy under jar to child (the jar is screwed down tightly so that the child cannot obtain the object inside), taps the jar and says, "Look, ______. Look at the pretty toy."

Child's behavior is then sampled for two minutes. E holds the board down on the table so that her hands are not too obvious.

Duration of task: two minutes

Appendix 6-5 Manual for Administering Persistence Tasks to 24 and 36-Month-Old Children

The persistence tasks are to be run in a room large enough to allow the mother to sit at least five feet behind the child and the experimenter about five feet in front of the child. Every effort should be made to make the room free of distractions. Ideally, the room should contain only a child's table and chair and two adult chairs.

The 24-month-old child is seated at the table. The mother is seated out of the child's view as far away as the room allows. The experimenter is seated in front of the child and five feet from the table. The above also pertains to 36-month-old children with one exception: the mother is not present. (She leaves the room during the trust session and does not return).

The mother should be instructed in advance about what to expect and what she should or should not do during the session. (see Appendix 1). The basic rules for the mother are as follows:

1. She should not initiate interaction with child.
2. She can respond to this statements in a natural way, but she should be as brief as possible.
3. She should not encourage child.

The basic rules for the experimenter are as follows:

1. Say only what is in the script to introduce tasks.
2. Maintain a neutral expression during entire session.
3. Do not smile or encourage child in any way.
4. When child asks for help, acknowledge difficulty by saying "It's hard, isn't it?" or "I know it's hard."
5. Whe child talks to you other than asking for help, say "I'm busy now. I can play with you (talk to you) later."
6. When child brings something to you, place it on table and say "I'm busy now."

7. When introducing tasks to child, let him proceed without full instructions if he wants to. Do not insist that he hear you out.

8. If child gets so upset he begins to cry, allow mother to soothe child. This soothing time is considered time out and should not be counted. After child is comforted resume session and scoring.

9. If child is performing task purposefully, let him finish before removing test material. This additional task time is not scored.

Surprise Box

KEYS

Show child toy completely assembled. Demonstrate with one key how to remove block, being sure to take block completely out and then putting it back. Put that key down. Pick up another key, help the child put it in the proper hole and remove the block.	"Look, I'm going to show you how to get this block out with this key. I'm going to put this key in here and turn it until the block pops up. There. Now let's do it together. Okay, you do it."

CUPS

Present cups and saucers to child. Demonstrate how to stack them.	"Here are some cups and saucers. Watch me stack them up. It's very hard, so you have to be careful. Okay, see if you can do it."

PUZZLES

Present one piece puzzle completely assembled to child. Take all pieces out, and put apple back in. Hand him banana piece and help him put it in. Assist him until he has concept of puzzle.	"Here is a puzzle. See how the pieces come out. Now we are going to put them back in. Can you put them back in?" (Once he has idea)..."That's right. Now you work it by yourself."
Present batch of small puzzles. Punch all the pieces out and demonstrate with one piece how to put them back in.	"Look at all these little puzzles. See how all the pieces come out. Now I'm going to put one together for you. See? Now you can play with these for a while."

BOOK

Present books to child.	"Here are some books for you to look at for a while."

CANDY

Give child a piece of candy and let him eat it. Take 2 pieces of candy and let him see you put it in can. Ask the child to get the candy. After time limit, help child get candy.	"Here's a piece of candy for you to eat. Now I'm going to put the candy in the can. See if you can get the candy out." "This is really a hard can to open, isn't it. Most kids can't open it, but I wanted to see if you could. Here's your candy."

Testing Session Description Including Dialogue

The tasks are presented in the following order:

1. Keys of Learning. This toy is a Child Guidance toy and can be purchased in your local store (5 minutes).
2. Stacking Cups. Stacking Cups is a Child Guidance toy and can be purchased in you local store (5 minutes).
3. Puzzle. The warm-up puzzle is a one-piece Playskool fruit puzzle and is not scored. A group of small plastic one-piece puzzles are used for scoring (5 minutes).
4. Books. Three Golden Books are used: *Mother Goose*; *Hush, Hush, It's Sleep Time*; and *The Picture Dictionary* (3 minutes).
5. Candy corn placed in refrigerator can (2 minutes).

Instructions to **Caregiver**

We are interested in observing how children of different ages play with a given set of toys. Some of the toys have certain elements of difficulty, and we want to see how these difficulties are overcome at the various ages. The examiner has been instructed to keep a matter of fact expression and not to encourage or help the child in any way. The examiner must act in this way because we are using many different examiners and we want the children to be treated the same. The total time for this part of the session is approximately 30 minutes.

If your child is 24 months old, you will be in the room during the session. It is important for you to maintain somewhat the same attitude as the examiner, but at the same time, you should try to act as natural as possible. You will sit in a chair behind the child. You should not initiate conversation or play with the child. If he comes to the examiner for help, she will say, "I know it's hard." If he comes to you for help you might say something like, "I can't help you now." Do not give any help. If he hands you a toy, merely put it back on the table. If the child becomes distressed at any time, please feel free to react as you normally would in order to make him comfortable again. Try to get him to resume playing with the toy if possible. In summary, we are asking the mother not to intervene or attract her child's attention, but we don't want the child to feel his mother is acting strangely.

If your child is 36 months old, you will be asked to wait just outside the testing room. If your child should become distressed, we will call you in to comfort him.

Keys to Learning

Goal Direction: On this task any behavior which involves getting the blocks out or in is "our goal-directed." If the child turns the box upside down to get the blocks out, this is still "our goal-directed" behavior.

Completes Task: Is marked when the child gets all the blocks out either by using the keys or by dumping them out. If he words at getting them in and succeeds, it should be marked again.

Flexibility: Can include asking for help. This is true for all tasks. Flexibility on this task also includes trying to find a new key hole, using the fingers to try to remove a block and picking the box up and turning it upside down. When pulling the blocks back in, it includes turning pieces to make them fit.

Stacking Cups

Goal Direction: Our-Goal-Directed-Stacking cups in saucer-cu-saucer... fashion. Making saucer-cup pairs and stacking pairs. Self-Goal-Directed-Arrenging saucer-cup pairs. Drinking from cups. Making stack of all cups. Making stack of all saucers.

Completes Task: Successfully making one stack using all cups and saucers in saucer-cup-saucer-...fashion.

Flexibility: Stacking cups and saucers in usual fashion. Reversing order. Making pairs and stacking pairs. Using arm to hold up stack. Trying to color code to figure out how to stack.

Puzzle

Goal Direction: Our goal Directed--Fitting or trying to fit pieces of puzzle. Self-goal oriented--Making a train, etc. out of blocks. Stacking blocks. Playing imaginatively with individual pieces of the puzzle, such as the car.

Completes Task: Fits all the pieces in the puzzles.

Flexibility: Turns pieces to fit. Turns blocks to fit. Pounds on piece. Goes from one block to another or from one piece to another in search of right one.

Candy

Goal Direction: Our-Goal-Directed--Trying to get candy out of can.
Self-Goal-Directed--Reading label on can. Using can as rattle.

Completes Task: Gets candy--which should be impossible.

Flexibility: Can include asking for help. Pulling at top. Twisting top. Prying top. Using mouth to open.

Books

Goal Direction: Our-Goal-Directed--Turing pages slowly enough to look at pictures.
Self-Goal-Directed--Flipping pages rather than looking at them. Standing books up.

Completes Task: Completely looks at one book.

Flexibility: Not applicable.

Appendix E-6

Manual for Administering Persistence Task to

48-Month-Old Children

48 MONTH PERSISTENCE

Task 1 - Fun Flowers (5 minutes)

Have two flowers disassembled. Present the one assembled flower to the child saying "See what I have, a flower in a pot." Take it apart, piece by piece, slowly (flower, leaf, leaf, stem, top of pot) saying "See, it all comes apart." See." Then reassemble piece by piece slowly (top of pot, stem, leaf, leaf, flower) saying "And I put it back together. See." Then present all three disassembled flowers to the child saying "Now you play with them."

Task 2 - Wacky Stack (5 minutes)

"Now, watch what I'm doing. I'm going to build a tower." Set the largest ring on the table saying, "First you take a ring" then place the largest ball upon the ring saying "Then a ball." Continue this procedure (placing rings and balls in order of size) until tower is complete. Say, "See, I built a tower. Now, lets knock it down." Knock the tower down then say, "Now you play with them."

Task 3 - Puzzles (1 - 7 piece puzzle and 2 - 15 piece puzzles) (5 minutes)

Take the 7 piece puzzle. Disassemble it. Take a piece and put it in place saying "This one goes here." Then give the child a piece and say, "Now you put this one in." Help him if he needs it. Then give the child the other two puzzles and say "Now you play with it."

Note: If the child starts to play with the puzzles before ;you complete the demonstration, simply stop the demonstration and let him play. If he does not seem to understand how to do a puzzle, continue the demonstration with 2 more puzzles pieces as above.

Task 4 - Books (3 minutes)

Same as 24 and 36 month persistence.

Task 5 - Magic Box (2 minutes)

Give the child a piece of candy. After he has finished, slide the box open, holding it so that he only sees the opening at the base of the box (and not at the top). Put in some more candy. Close the box, turn it several times, and hand it to the child saying, "There's more candy in here if you want it."

48 MONTH PERSISTENCE

DEFINITION OF E'S GOAL

Fun Flowers

Taking apart or putting together flowers, even if child is not putting them together correctly.

Wacky Stack

Attempting to stack balls and rings alternately. Must be ring, ball, ring, ball, etc., although child may not be doing it according to size of ring and ball.

Puzzles

Same as 24 and 36 month.

Books

Looking at books ro "reading" story from books. (same as 24 and 36 month).

Magic Box

Any purposeful attempt to open magic box.

Appendix F-1

SCORING FORM FOR TRUST
6 & 12 MONTHS

Name ____________________ Tester ____________________

Test Age __________ Rater ____________________

DATE OF BIRTH ______ DATE OF ENTRY ______ DATE ______ TIME ______

CENTER ______ Mother Caregiver __ ______

Rate both + and - parts of each scale.

1. E ENTERS and stands 6' in front of the baby and smiles

Scale 1 Looking

______ 0 fleeting or no look at E
______ +1 1 or 2 brief looks (off + on) at E
______ +2 Looks half of the time at E (steadily or off + on)
______ +3 Looks most of the time at E

______ 0 fleeting or no look at M
______ -1 1 or 2 brief looks (off + on) at M
______ -2 looks half of time at M (steadily or off + on)
______ -3 looks most of time at M

Scale 2: Affect

______ 0 no positive affect
______ +1 brief smiles or positive vocalizations
______ +2 smiles most of time
______ +3 laughs, excited or wiggles with delight

______ 0 no negative affect
______ -1 silent cry fact or brief cry
______ -2 frets, whines, or brief cry
______ -3 more than brief cry or scream

COMMENTS

2. E TALKS to the baby in a cheerful manner

Scale 1: Looking

_____ 0 fleeting or no look at E
_____+1 1 or 2 brief looks (off + on) at E
_____+2 looks half of the time at E (steadily or off + on)
_____+3 looks most of the time at E

_____ 0 fleeting or no look at M
_____-1 1 or 2 brief looks (off and on) at M
_____-2 looks half of the time at M (steadily or on + off)
_____-3 looks most of time at M

Scale 2: Affect

_____ 0 no positive affect
_____+1 brief smiles or positive vocalizations
_____+2 smiles most of time
_____+3 laughs, excited, or wiggles with delight

_____ 0 no negative affect
_____-1 silent cry face or brief fret
_____-2 frets, whines, or brief cry
_____-3 more than brief cry or scream

3. E APPROACHES the baby, smiles and says hello

Scale 1: Looking

_____ 0 fleeting or no look at E
_____+1 1 or 2 brief looks (off + on) at E
_____+2 looks half of the time at E (steadily or off + on)
_____+3 looks most of the time at E

_____ 0 fleeting or no look at M
_____-1 1 or 2 brief looks (off and on) at M
_____-2 looks half of time at M (steadily or off + on)
_____-3 looks most of time at M

Scale 2: Affect

_____ 0 no positive affect
_____+1 brief smiles or positive vocalizations
_____+2 smiles most of time
_____+3 laughs, excited, or wiggles with delight

_____ 0 no negative affect
_____-1 silent cry face or brief fret
_____-2 frets, whines, or brief cry
_____-3 more than brief cry or scream

Scale 3: Postural Adjustment

_____ 0 no postural approach
_____+1 leans towards and looks at E
_____+2 single or brief reaches to E. May stop before
completing gesture.
_____+3 prolonged reach for E or several brief reaches or
actively tries to get E.

_____ 0 no postural avoidance
_____-1 coy response or shy (i.e., peeks at E) or yawns or
rubs eyes or scratches self.
_____-2 leans away at least briefly from E with eye aversion
and head turn. May result from activity burst.
_____-3 usually leans or turns body and head away from E. May
appear to result from interest in objects.

5. E PICKS UP baby, holds him, and walks around the room

Scale 2: Affect

_____ 0 no positive affect
_____+1 brief smiles or positive vocalizations
_____+2 smiles most of time
_____+3 laughs, excited, or wiggles with delight

_____ 0 no negative affect
_____-1 silent cry face, brief fret
_____-2 frets, whines, or brief cry
_____-3 more than brief cry or scream

Scale 4: Postural Adjustment When Held

_____ 0 no positive adjustment
_____+1 briefly rests torso on E
_____+2 rests torso on E most of time
_____+3 rests torso on E most of time and clearly enjoys physical contact, e.g., cuddles or clings or reaches for E or grasps with legs.

_____ 0 no negative adjustment
_____-1 holds both hands away from E
_____-2 posture is arched backwards or strains torso to turn away from E or to look at M.
_____-3 struggles when held. Desires to terminate contact.

Scale 1(b): Looking at Mother

_____ 0 fleeting or no look at M
_____-1 1 or 2 brief looks (off and on) at M
_____-2 looks (or tries to look) half of time at M (steadily or off + on)
_____-3 looks (or tries tol look) most of time at M

6. E WIGGLES the baby in the air several times

Scale 5: Affect in Reaction to Frolic

_____ 0 no positive affect
_____+1 brief smiles or positive vocalizations
_____+2 warms up to play or smiles most of time
_____+3 enthusiastic, laughs, or wiggles with delight

_____ 0 no negative affect
_____-1 silent cry face or brief fret
_____-2 frets, whines, or brief cry
_____-3 more than brief cry or scream, or struggles to be put down when lifted over head

Scale 1(b): Looking at MOther

_____ 0 fleeting or no look at M
_____-1 1 or 2 brief looks (off and on) at M
_____-2 looks (or tries to look) half of time at M (steadily or off and on)
_____-3 looks (or tries to look) most of time at M

TRANSITION: Stranger [illegible] behind barrier. Mother leaves.

7. E [illegible] holding baby. Mother is gone.

Scale 5: Affect

_____ 0 no positive affect
_____+1 brief smiles or positive vocalizations
_____+2 smiles most of time
_____+3 laughs, excited, or wiggles with delight

_____ 0 no negative affect
_____-1 silent cry face, brief fret
_____-2 frets, whines, or brief cry
_____-3 more than brief cry or scream

8. E PUTS baby into infant table

Scale 6: Reaction to Return to Infant Table

_____0 no positive reaction
_____+1 brief smiles or positive vocalization or brief examination of table.
_____+2 smiles most of time or sustained exploration of table
_____+3 excited and smiles or laughs with real enjoyment.

_____0 no negative reaction
_____-1 some clinging or brief fret but fairly quickly accepts being put down.
_____-2 clings to E or frets or whines
_____-3 clings tightly to E or resists being put down or more than brief cry or scream. May thrash wildly.

9. E OFFERS TOY TO BABY. E offers it repeatedly if baby does not take it

Scale 2: Affect

______ 0 no positive affect
______ +1 Brief smiles or positive vocalization
______ +2 smiles most of time
______ +3 laughs, excited, or wiggles with delight

______ 0 no negative affect
______ -1 silent cry face, brief fret
______ -2 frets, whines, or brief cry
______ -3 more than brief cry or scream

Scale 7: Acceptance of Toy

______ 0 Never takes toy.
______ +1 Takes toy after offered 3 or more times.
______ +2 Takes toy on 2nd offer or with hesitation on first offer.
______ +3 Reaches immediately for and takes toy as soon as sees toy.

Scale 8: Intensity of Exploration IF Accepts Toy

______ 0 Very minimal exploration: puts toy down soon after taking it.
______ +1 Little exploration: touches or holds toy passively with little manipulation. May include some mouthing.
______ +2 Moderate exploration: manipulation of toy is intermittent or sustained+casual or brief+intense.
______ +3 High exploration: sustained visual attention while manipulating toy or enthusiasm while banging toy. May include some mouthing.

TRANSITION: Stranger takes toy from baby and leaves

10. M ENTERS and stands 6' in front of baby. She talks and smiles

Scale 1: Looking

______ 0 fleeting or no look at M
______+1 1 or 2 brief looks (off + on) at M
______+2 looks half of the time (steadily or off + on) at M
______+3 looks most of the time at M

Scale 2: Affect

______ 0 no positive affect
______+1 brief smiles or positive vocalization
______+2 smiles most of time
______+3 laughs, excited, or wiggles with delight

______ 0 no negative affect
______-1 silent cry face, brief fret
______-2 frets, whines, or brief cry
______-3 more than brief cry or scream

Scale 3: Postural Adjustment

______ 0 no postural approach
______+1 leans towards and looks at M
______+2 single or brief reaches to M. May stop before completing gesture.
______+3 prolonged reach for M or several brief reaches or actively tries to get to M.

______ 0 no postural avoidance
______-1 coy response or shy (i.e. peeks at M) or yawns or rubs eyes or scratches self
______-2 leans away at least briefly from M with eye aversion and head turn. May result from activity burst.
______-3 usually leans or turns body and head away from M. May appear to result from interest in objects.

11. M PATS the baby's fingers in a game-like fashion several times

Scale 1: Looking

______ 0 fleeting or no look at M
______+1 1 or 2 brief looks (off + on) at M
______+2 looks half of the time (steadily or off + on) at M
______+3 looks most of the time at M

Scale 2: Affect

______ 0 no positive affect
______+1 brief smiles or positive vocalization
______+2 smiles most of time
______+3 laughs, excited, or wiggles with delight

______ 0 no negative affect
______-1 silent cry face, brief fret
______-2 frets, whines, or brief cry
______-3 more than brief cry or scream

Scale 3: Postural Adjustment--hand touching

______ 0 no postural approach
______+1 eventually allows M to touch hand or leans towards and looks.
______+2 allows M to touch hand on first time, or briefly reaches for M
______+3 touches, clasps, or reaches for M's hand, or steadily reaches for M.

______ 0 no postural avoidance
______-1 removes hand when touched once or twice.
Or Rubs eyes, or yawns, or scratches self, or coy avoidance, "shy"
______-2 jerks hand away one or more times, or removes hand when touched 3 or more times.
______-3 Never allows hand to be touched or usually leans or turns body and head away from M

12. M HOLDS the baby and walks around the room

Scale 2: Affect

______ 0 no positive affect
______+1 brief smiles or positive vocalizations
______+2 smiles most of time
______+3 laughs, excited, or wiggles with delight

______ 0 no negative affect
______-1 silent cry face, brief fret
______-2 frets, whines, or brief cry
______-3 more than brief cry or scream

Scale 4: Postural Adjustment When Held

______ 0 no positive adjustment
______+1 briefly rests torso on M
______+2 rests torso on M most of time
______+3 rests torso on M most of time and clearly enjoys physical contact, e.g. cuddles or clings or reaches for M or grasps with legs.

______ 0 no negative adjustment
______-1 holds both hands away from M
______-2 posture is arched backwards or strains to turn away from M.
______-3 struggles when held and desires to terminate contact.

13. M JIGGLES the baby in the air several times

Scale 5: Affect in Reaction to Frolic

______ 0 no positive affect
______+1 brief smiles or positive vocalization
______+2 warms up to play or smiles most of time
______+3 enthusiastic, laughs, or wiggles with delight

______ 0 no negative affect
______ 1 silent cry face or brief fret
______ 2 frets, whines, or brief cry
______-3 more than brief cry or scream, or struggles to be put down when lifted over head.

14. M PUTS baby into [illegible] table

Scale 6: Reaction to Return to Infant Table

______ 0 no positive reaction
______ +1 brief smiles or positive vocalization or brief examination of table.
______ +2 smiles most of time or sustained exploration of table.
______ +3 excited and smiles or laughs with real enjoyment. May be in reaction to mother's game.

______ 0 no negative reaction
______ -1 some clinging, or brief fret but fairly quickly accepts being put down
______ -2 clings to M or frets or whines.
______ -3 clings tightly to M or Resists being put down, or more than brief cry, scream, or may thrash wildly.

15. M OFFERS TOY to baby. M offers it repeatedly if the baby does not take it

Scale 2: Affect

______ 0 no positive affect
______ +1 brief smiles or positive vocalization
______ +2 smiles most of time
______ +3 laughs, excited or wiggles with delight

______ 0 no negative affect
______ -1 silent cry [illegible]
______ -2 frets, whines, or [illegible]
______ -3 more than brief cry or scream

Scale 7: Acceptance of Toy

______ 0 Never takes toy.
______ +1 Takes toy after offered 3 or more times.
______ +2 Takes toy on 2nd offer or with hesitation on first offer.
______ +3 Reaches immediately for and takes toy as soon as sees toy.

Scale 8: Intensity of Exploration IF Accepts Toy

______ 0 Very minimal exploration: puts toy down soon after taking it.
______ +1 Little exploration: touches or holds toy passively with little manipulation. May include some mouthing.
______ +2 Moderate exploration: manipulation of toy is intermittent or sustained + casual or brief + intense.
______ +3 High exploration: sustained visual attention while manipulating toy or enthusiasm while banging toy. May include some mouthing.

16. M LEAVES slowly, waving bye-bye

Scale 1: Looking

_____0 fleeting or no look at M at departure point
_____+1 1 or 2 brief looks (off + on) at M or at departure point
_____+2 looks half of the time (steadily or off + on) at M or at departure point
_____+3 looks most of the time at M or at departure point

Scale 2: Affect

_____0 no positive affect
_____+1 brief smiles or positive vocalizations
_____+2 smiles most of time
_____+3 laughs, excited or wiggles with delight

_____0 no negative affect
_____-1 silent cry face, brief fret
_____-2 frets, whines or brief cry
_____-3 more than brief cry or scream

TRANSITION: Mother and Stranger return to room

Appendix FR-2

SCORING FORM FOR TRUST

24MONTHS

NAME______________________ | | | | TESTER______________________ | | |

| | | | DATE OF BIRTH________ DATE OF ENTRY________ RATER______________________

CENTER______________ MOTHER CAREGIVER______________________ | | | DATE__________ TIME________

1. Immediate Response to New Person

A. Affective Reaction to Introduction. (Code both positive and negative. Make two ratings.)

______0 no positive affect

_____+1 brief smiles or positive vocalization

_____+2 frequent smiles

_____+3 Laughs, excited

_____) no negative affect

_____-1 sad or silent cry-face or negative vocalizations

_____-2 frets, whines, stiffens body

_____-3 more than brief cry

B. Tension Displayed during Introduction.

_____1. Has bounce, eager

_____2. Body has tone and is generally relaxed.

_____3. Becomes tense at times although body has relaxed quality; subsequent quick return to supple, relaxed condition.

_____4. Inert, may be flaccid most of the time, passive.

_____5. Body is tense more than ½ of time, may be stiff or tight in one or more areas, startles, quivers, trembles easily.

C. Rating of Behaviors

_____1. Appraches E, does not look back at caregiver.

_____2. Approaches E but ref[illegible]k to caregiver once or twice.

_____3. Tentatively approac[illegible] hesitant.

_____4. Stands away from E, watches with interest.

_____5. Stands away from E, watches warily.

_____6. Clings to caregiver or shows aversion to E.

Comments____

____

____

2. Delayed Response to New Person

A. Rating of Affect. (Code both positive and negative.)

_____ 0 no positive affect
_____+1 brief smile or positive vocalization
_____+2 frequent smiles
_____+3 laughs, excited

_____ 0 no negative affect
_____-1 sad, silent cry-face, or negative vocalization
_____-3 frets, whines, stiffens body
_____-3 more than brief cry

B. Rating of Tension

_____1. Has bounce, eager
_____2. Has tone, relaxed
_____3. Some tenseness-- returns to relaxed quickly
_____4. Inert, flaccid, passive
_____5. Tense more than ½ time
_____6. Taut or tense, resistant.

C. Rating of Behaviors

_____1. Approaches E, does not look back at caregiver
_____2. " " but refers back to caregiver once or twice.
_____3. Tentatively approaches E, hesitant.
_____4. Stands away from E, watches with interest.
_____5. Stands away from E, watches warily.
_____6. Clings to caregiver, shows aversion to E.

3. Approach to New Person

A. Reaction to E's Invitation to Come and See the Toy.

_____1. Approaches readily at first suggestion from E.
_____2. " hesitantly at second suggestion from E.
_____3. " after caregivers suggestion.
_____4. " readily with caregiver accompanying.
_____5. " reluctantly with caregiver accompanying.
_____6. Refuses altogether.

B. Affect on Approach

_____ 0 no positive affect
_____+1 brief smile or positive vocalization
_____+2 frequent smiles
_____+3 laughs, excited

_____ 0 no negative affect
_____-1 sad or silent cry-face or negative vocalization
_____-2 frets, whines, stiffans body
_____-3 more than brief cry

C. Body Tension During Approach

_____1. Has bounce, eager.
_____2. Has tone- relaxed.
_____3. Some tenseness-- returns to relaxed.
_____4. Inert, flaccid, passive.
_____5. Tense more than ½ time.
_____6. Taut or tense predominantly, resistant.

D. Interest in Toy

_____1. High interest in form board, seeks to see better.
_____2. Some interest in toy.
_____3. No interest in toy.
_____4. High interest in 2nd toy, seeks to see better.
_____5. Some interest in 2nd toy.
_____6. No interest in either toy.

4. Invitation to Lapsitting

A. Behavior during invitation to lapsitting.

_____1. Lifts arms to be picked up immediately or moves toward E.

_____2. Hesitates and then moves toward E.

_____3, Moves toward E with encouragement from caregiver.

_____4. Stands immobile, no response.

_____5. " " , cries or indicates his unwillingness.

_____6. Retreats to caregiver's lap or arms fearfully.

B. Affect during Invitation to Lapsitting Task.

_____ 0 no positive affect

_____+1 brief smile or positive vocalization

_____+2 frequent smiles

_____+3 laughs, excited

_____ 0 no negative affect

_____-1 sad, silent cry-face, or negative vocalization

_____-2 frets, whines, stiffens body

_____-3 more than brief cry

C. Body Tension during Invitation to lapsitting task

_____1. Has bounce, eager.

_____2. Has tone- relaxed.

_____3. Some tenseness-- returns to relaxed.

_____4. Inert, flaccid, passive.

_____5. Tense more than ½ time.

_____6. Taut or tense predominantly, resistant.

5. Reaction to Being Taken to New Room

A. Reaction to E's Suggestions to Accompany Her to New Room

A

_____1. Accepts first suggestion
_____2. " second "
_____3. " third "
_____4. Accepts with caregiver's intervention.
_____5. Accompanies E. reluctantly after caregiver's intervention.
_____6. Refuses altogether.

B. Affect on Way to Room

_____ 0 no positive affect
_____+1 Brief smile or positive vocalization
_____+2 frequent smiles
_____+3 laughs, excited

_____ 0 no negative affect

_____-1 sad, silent cry face, or negative vocalization
_____-2 frets, whines, stiffens body
_____-3 more than brief cry

C. Body Tension to Way to Room

_____1. Has bounce, eager
_____2. Has tone-relaxed
_____3. Some tenseness-returns to relaxed
_____4. Inert, flaccid, passive
_____5. Tense more than ½ time
_____6. Taut or tense predominantly, resistant.

6 Reaction to E. During Play with New Toy

A. Behavior during play with new toy.

_____1. Gets into position to play immediately.
_____2. Positions near E. but does not immediately begin play
_____3. Watches with interest.
_____4. Approaches toy only after encouragement from caregiver.
_____5. Stands immobile, does not attempt to involve self with toy.
_____6. Vocalizes refusal or retreats from situation.

B. Affect during Play with New Toy

_____ 0 no positive affect
_____+1 brief smile or positive vocalization.
_____+2 frequent smiles
_____+3 laughs, excited

_____ 0 no negative affect
_____-1 sad, silent cry face, or negative vocalization
_____-2 frets, whines, stiffens body
_____-3 more than brief cry

C. Body Tension druing Play with New Toy

_____1. Has bounce, eager
_____2. Has tone-relaxed
_____3. Some tenseness - returns to relaxed
_____4. Inert, flaccid, passive
_____5. Tense more than ½ time
_____6. Taut or tense predominantly, resistant

• Reaction to Ball-Rolling Game

A. Reaction to Ball-Rolling Game

_____1. Gets into position and tries to return form, then ball.
_____2. Sits to play but does not return rolled object at once.
_____3. Returns ball after several suggestions.
_____4. Sits only after caregiver intervenes.

_____5. Rolls ball only after caregiver intervenes.
_____6. Will not sit or take part in any way.

B. Affect during Ball-Rolling Game

_____ 0 no negative affect
_____+1 brief smile or positive vocalization
_____+2 frequent smiles
_____+3 laughs, excited

_____ 0 no negative affect
_____-1 sad, silent cry face, or negative vocalization
_____-2 frets, whines, stiffens body
_____-3 more than brief cry

C. Body Tension during Ball-Rolling Game

_____1. Has bounce, eager
_____2. Has tone-relaxed
_____3. Some tenseness-returns to relaxed
_____4. Inert, flaccid, passive
_____5. Tense more than ½ time
_____6. Taut or tense predominantly, resistant

8. Rolling Ball on Board

A. Reaction to Rolling Ball on Board

_____1. Tries immediately to roll ball on board.
_____2. Requests E. to do it again
_____3. Tries task after second encouragement from E.
_____4. Tries task after encouragement from caregiver
_____5. Watches E. but does not participate.
_____6. Refuses altogether, retreats from board.

B. Affect during Board Rolling Task

_____ 0 no positive affect
_____+1 brief smile or positive vocalizations
_____+2 frequent smiles
_____+3 laughs, excited

_____ - no negative affect
_____-1 sad, silent cry face or negative vocalization
_____-2 frets, whines, stiffens body
_____-3 more than brief cry

C. Body Tension during Board Rolling Task

_____1. Has bounce, eager
_____2. Has tone-relaxed
_____3. Some tenseness-returns to relaxed
_____4. Inert, flaccid, passive
_____5. Tense more than ½ time
_____6. Taut to tense predominantly, resistant

9. Walking the Board

A. Behavior during Board-walking Task

(E)____(CG)____1. Walks down board in a relaxed manner.
(E)____(CG)____2. Momentarily immobile. Walks down board slowly and hesitates periodically.
(E)____(CG)____3. Must be encouraged to walk on board, stops frequently.
(E)____(CG)____4. Stands immobile on board.
(E)____(CG)____5. Verbally rejects task.
(E)____(CG)____6. Gets off board, physically and verbally rejects task.

B. Hand holding during Board-walking Task

(E)____(CG)____1. Accepts first suggestion to hold hand.
(E)____(CG)____2. Accepts second suggestion to hold hand.
(E)____(CG)____3. Accepts third suggestion to hold hand.
(E)____(CG)____4. Accepts with caregiver's intervention to hold hand.
(E)____(CG)____5. Hold hand reluctantly after intervention.
(E)____(CG)____6. Refuses altogether to hold hand.

C. Affect during Board-walking Task

(E)____(CG)____ 0 no positive affect
(E)____(CG)____+1 brief smile or positive vocalization
(E)____(CG)____+2 frequent smiles
(E)____(CG)____+3 laughs, excited

(E)____(CG)____ - no negative affect
(E)____(CG)____-1 sad, silent cry face, or negative vocalization
(E)____(CG)____-2 frets, whines, stiffens body
(E)____(CG)____-3 more than brief cry

D. Body Tension during Board-walking task.

(E)____(CG)____1. Has bounce, eager
(E)____(CG)____2. Has tone-relaxed
(E)____(CG)____3. Some tenseness-returns to relaxed
(E)____(CG)____5. Tense more than ½ time
(E)____(CG)____6. Taut or tense predominantly, resistant.

Appendix F -3 EXPERIMENTER'S

SCORING FORM FOR TRUST

36 MONTHS

NAME____TESTER____________________| | |

| | | |DATE OF BIRTH________DATE OF ENTRY________RATER____________________

CENTER______________MOTHER CAREGIVER________________________| | |DATE________TIME__________

1. Immediate Response to New Person

A. Affect (Code both positive and negative. Make two ratings.)

______0 no positive affect

______+1 brief smiles or positive vocalizations

______+2 frequent smiles

______+3 laughs, excited

______ 0 no negative affect

______-1 sad, silent cry face, or negative vocalizations

______-2 frets, whines, stiffens body

______-3 more than brief cry

B. Tension Displayed During Introduction

______ 1. Has bounce, eager to participate.

______ 2. Body has tone and is generally relaxed.

______ 3. Becomes tense at times although body has relaxed quality; subsequent quick return to supple, relaxed condition.

______ 4. Inert; may be flaccid most of the time, passive.

______ 5. Body is tense more than half the time; may be stiff or tight in one or more areas; startles, quivers or trembles easily.

COMMENTS:

2. Reaction to Being Taken to New Room

A. Reaction to E's suggestion and to Accompanying Her

______1. Accepts first suggestion.
______2. " second "
______3. " third "
______4. " with caregiver's intervention.
______5. Accompanies E reluctantly after caregiver's intervention.
______6. Refuses altogether

B. Affect on Way to Room

______ 0 no positive affect
______+1 brief smiles, or positive vocalization
______+2 frequent smiles
______+3 laughs, excited

______ 0 no negative affect
______-1 sad, or silent cry face, or negative vocalization
______-2 frets, whines, stiffens body
______-3 more than brief cry

C. Body Tension on Way to Room

______1. Has bounce, eager to participate.
______2. Has tone relaxed.
______3. Some tenseness-returns to relaxed.
______4. Inert, flaccid, passive.
______5. Taut or tense predominantly, resistant.

Appendix F-4 OBSERVER'S
SCORING FORM FOR TRUST

36 and 48 month

NAME________________________________TESTER____________________

DATE OF BIRTH______DATE OF ENTRY________RATER____________________.

CENTER________ MOTHER CAREGIVER________________________ DATE________ TIME________

3. Warm-up Toe Touching Task

4. Rocking Task - Alone

A. Affect during Rocking Task (Code both positive and negative.)

______ 0 no positive affect
______+1 brief smiles or positive vocalizations
______+2 frequent smiles
______+3 laughs, excited

______ 0 no negative affect
______-1 sad, silent cry face, or negative vocalizations
______-2 frets, whines, stiffens body
______-3 more than brief cry

B. Body Tension During Rocking Task

______ 1. Has bounce, eager to participate.
______ 2. Has tone-relaxed.
______ 3. Some tenseness-returns to relaxed.
______ 4. Inert, flaccid, passive.
______ 5. Tense more than ½ time.
______ 6. Taut or tense predominantly, resistant.

C. Behavior during Rocking Task

______ 1. Eagerly imitates and rocks in unison, immediate active response.
______ 2. Accommodates body movements to E. and rocks in unison.
______ 3. Rocks quite a bit but not move unison.
______ 4. Rocks a couple of times.
______ 5. Watches rocking but does not participate.
______ 6. Retreats from position 3 ft. from E., vocalizes "no" or indicates behaviorally a desire to terminate the game, No rocking.

5. Rocking Task - Holding E's Hands

A. Affect during 2nd Rocking

______ 0 no positive affect

______+1 brief smiles, or positive vocalizations

______+2 frequent smiles

______+3 laughs, excited

______ 0 no negative affect

______-1 sad, silent cry face, or negative vocalizations

______-2 frets, whines, stiffens body

______-3 more than brief cry

B. Body Tension during 2nd Rocking

______1. Has bounce, eager to participate

______2. Has tone-relaxed

______3. Some tenseness-returns to relaxed

______4. Inert, flaccid, passive

______5. Tense more than ½ time

______6. Taut or tense predominantly, resistant

C. Behavior during 2nd Rocking

______1. Eagerly imitates and rocks in unison, immediate active response.

______2. Accommodates body movements to E and rocks in unison

______3. Rocks quite a bit but not in unison.

______4. Rocks a couple of times

______5. Watches rocking but does not participate

______6. Retreats from position 3 ft. from E, vocalizes "no," or indicates behaviorally a desire to terminate the game. No rocking.

D. Holding Hands with E

______1. Takes E's hands on 1st suggestion

______2. Takes E's hands on 2nd suggestion

______3. Allows E to take and hold hands

______4. Holds hands briefly but withdraws them

______5. Withdraws hands as E reached for them, but stays in situation with E.

______6. Retreats from E, hides hands, or vocalizes a negative reaction to physical contact with E.

6. Lapsitting

A. Affect during Lapsitting Task

______ 0 no positive affect
______+1 brief smiles or positive vocalizations
______+2 frequent smiles
______+3 laughs, excited

______ 0 no negative affect
______-1 sad, silent cry face, or negative vocalizations
______-2 frets, whines, stiffens body
______-3 more than brief cry

B. Body Tension during Lapsitting Task

______1. Has bounce, eager to participate
______2. Has tone-relaxed
______3. Some tenseness-returns to relaxed
______4. Inert, flaccid, passive
______5. Tense more than ½ time
______6. Taut or tense predominantly, resistant.

C. Behavior during Lapsitting Task

______1. Sits on E's lap after 1st suggestion
______2. Sits on E's lap after 2nd suggestion
______3. Sits on chair as it was placed
______4. Moves chair further away from E
______5. Moves chair closer to M
______6. Stands immobile, no response, or negative response to any suggestions.

7. Blindfolding

A. Affect during Blindfolding

(E)______(CG)______ 0 no positive affect
(E)______(CG)______+1 brief smiles or positive vocalizations
(E)______(CG)______+2 frequent smiles
(E)______(CG)______+3 laughs, excited

(E)______(CG)______ 0 no negative affect
(E)______(CG)______-1 sad, silent cry face, or negative vocalizations
(E)______(CG)______-2 frets, whines, stiffens body.
(E)______(CG)______-3 more than brief cry

B. Body Tension during Blindfolding

(E)______(CG)______1. Has bounce, eager to participate
(E)______(CG)______2. Has tone-relaxed
(E)______(CG)______3. Some tenseness-returns to relaxed
(E)______(CG)______4. Inert, flaccid, passive
(E)______(CG)______5. Tense, more than ½ time
(E)______(CG)______6. Taut or tense predominantly, resistant

C. Behavior during Blindfolding

(E)______(CG)______1. Accepts the blindfold, stands quietly as it is put on. May touch E in a relaxed manner.
(E)______(CG)______2. Accepts the blindfold but reaches up and tries to take it off. Is able to relax with blindfold only when given reassurance by E.
(E)______(CG)______3. Accepts the blindfold only with continual feeling of it and with contact with E having a tense quality.
(E)______(CG)______4. Protests the blindfold verbally and physically and accepts it finally with heightened tension.
(E)______(CG)______5. Protests and clutches or clings to E after blindfold is in place.
(E)______(CG)______6. Refuses to be blindfolded both physically and verbally.

8. Walking the Board

A. Affect during Board-walking Task

(E)____(CG)____ 0 no positive affect
(E)____(CG)____+1 brief smiles or positive vocalization

(E)____(CG)____+2 frequent smiles

(E)____(CG)____+3 laughs, excited

(E)____(CG)____ 0 no negative affect

(E)____(CG)____-1 sad, silent cry face, or negative vocalization
(E)____(CG)____-2 frets, whines, stiffens body

(E)____(CG)____-3 more than brief cry

B. Body Tension during Board-walking Task

(E)____(CG)____1. Has bounce, eager to participate

(E)____(CG)____2. Has tone-relaxed

(E)____(CG)____3. Some tenseness-returns to relaxed
(E)____(CG)____4. Inert, flaccid, passive

(E)____(CG)____5. Tense more than ½ time

(E)____(CG)____6. Taut or tense predominantly, passive

C. Behavior during Board-walking Task

(E)____(CG)____1. Walks down board holding E's hand in a relaxed manner.

(E)____(CG)____2. Momentarily immobile. Walks down board slowly and hesitates periodically. Holds E's hand tightly.

(E)____(CG)____4. Stands immobile on board. Verbally rejects task. Still holds E's hand.

(E)____(CG)____5. Clutches E. Verbally rejects task. Clings.

(E)____(CG)____6. Gets off board. Tries to get blindfold off. Angry at E.

9. Jumping Task

A. Affect during Jumping-Task

(E)____(CG)____0 no positive affect
(E)____(CG)____+1 brief smile or positive vocalizations
(E)____(CG)____+2 frequent smiles
(E)____(CG)____+3 laughs, excited

(E)____(CG)____0 no negative affect
(E)____(CG)____-1 sad, silent cry face, or negative vocalizations
(E)____(CG)____-2 frets, whines, stiffens body
(E)____(CG)____-3 more than brief cry

B. Body Tension during Jumping-Task

(E)____(CG)____1. Has bounce, eager to participate
(E)____(CG)____2. Has tone-relaxed
(E)____(CG)____3. Some tenseness-returns to relaxed
(E)____(CG)____4. Inert, flaccid, passive
(E)____(CG)____5. Tense more than 1/2 time
(E)____(CG)____6. Taut or tense predominantly, resistant

C. Behavior during Jumping-Task

(E)____(CG)____1. Jumps into E's arms happily on 1st suggestion
(E)____(CG)____2. Reaches for E and falls into, rather than jumps into E's arms with a hesitant expression after 1st suggestion
(E)____(CG)____3. Jumps into E's arms after 2nd suggestion
(E)____(CG)____4. Reaches for E and falls (or glides) into her arms after 2nd suggestion
(E)____(CG)____5. Jumps or falls into E's arms after 3rd suggestion
(E)____(CG)____6. Refuses task and must be lifted off chair

10. Reunion with Caregiver

A. Affect during Reunion

______0 no positive affect

______+1 brief smiles or positive vocalizations

______+2 frequent smiles

______+3 laughs, excited

______0 no negative affect

______-1 sad, silent cry face, or negative vocalizations

______-2 frets, whines, stiffens body

______-3 more than brief cry

B. Body Tension during Reunion

______1. Has bounce

______2. Has tone-relaxed

______3. Some tenseness-returns to relaxed

______4. Inert, flaccid

______5. Tense more than 1/2 time

______6. Taut or tense predominantly

C. Behavior during Reunion

______1. Acknowledges Caregiver's greeting and happily goes to her and converses about the experience.

______2. Acknowledges Caregiver's greeting and goes to her.

______3. Ignores Caregiver's greeting but goes to her.

______4. Ignores Caregiver's greeting. Remains stationary just inside room.

______5. Goes to Caregiver and clings. May look back at E.

______6. Goes to Caregiver and clings and cries and displays a negative affect toward the E who remains near the door.

Appendix C-1 INSTRUCTIONS TO CODERS [illegible]

General rules:

1. Please be certain that you have the appropriate form for the age of the child whose data you are coding.

2. Please note at the top of the coding form whether the data you are coding is from Wave 1 or Wave 2, and whether [illegible] data.

3. Please double-check your own work. [illegible] re-check.

4. All blanks on the coding form are to be filled in [illegible]

Name of child: Each child will be assigned a unique [illegible] number, which will be placed in blocks labeled (1-2). Until these numbers are assigned, please write the name of the child above the words "Name of Child".

Age of child: In blocks (3-4), place child's age (test [illegible] age), i.e., 06 (six month test), 12 (twelve month test), 24 (twenty-four month test), 36 (thirty six month test), or 48 (forty-eight month test).

Race: In block (5) place a 1 if the child is black [illegible] white.

Sex: In block (6), place a 1 if the child is [illegible] if the child is a female.

SES: In block (7), place a 1 if the child is [illegible] lower class or a 2 if the child is considered middle class.

[illegible] On each of the data, you will see three small [illegible] numbers [illegible] just below the child's name. [illegible] of the child, using the codes above. [illegible] 1-1-1, the child is a black female, lower class.

Tester: Each tester has been assigned a number, which should be placed in block 8:

Joanne-1
Linda-2
Lance-3
Barb-4
[illegible]-5
Karen-6
[illegible]-7
[illegible]-8
[illegible]-9

Sue- A
Bob- B
Kim- C
Michael- D
Bill- E
[illegible] F
[illegible]- G

Area: In block (9) place the number 4.

Trust Summary Coding Form:

On the raw data sheets, the possible responses to each situation are number. For example, in 36 month trust, there are two categories of responding to situation 1 (Immediate response to new person): A. Affect and B. Tension displayed during Introduction. On the coding sheet for 36 month trust, you will see the corresponding situation (situation 1) with room to code the information from section A (affect) and B (body tension). You will see that section A (affect) has space for both the positive (pos.) and negative (neg.) affect which was recorded on the raw data form. Make sure you record both positive and negative affect on the coding form. Simply place the number of the item checked on the raw data form in the appropriate space on the coding form. For example, if on the 36 month trust the following affect was recorded:

1. Immediate Response to New Person

A. Affect

______ 0 no positive affect
___✓___ +1 brief smiles or positive vocalizations
______ +2 frequent smiles
______ +3 laughs, excited

___✓___ 0 no negative affect
______ -1 sad, silent cry face, or negative vocalizations
______ -2 frets, whines, stiffens body
______ -3 more than brief cry

Then, on the coding sheet you would record:

1. A pos. ___1___ (10)
neg. ______ ___0___ (11-12)

BE CERTAIN TO FILL IN ALL BLANKS; IF ONE SITUATION IS NOT CODED IN THE RAW DATA, PLEASE NOTE THAT ON THE CODING FORM AS THE REASON FOR OMITTING THE DATA ON THE CODING SHEET. (There is one exception to filling in all blanks. You will notice that there are two blanks for negative affect and only one number to place in them. Place the appropriate number in the second blank, leaving the first one empty.)

Coding Sheet-Persistence:

Each of the persistence tasks have a separate section on the coding sheet, which corresponds to the separate pages for each task on the raw data. Each task is coded in the same manner.

Each task is labelled and the appropriate task number has already been filled in on the coding forms.

Response latency: A zero(0) is placed in the blank if the child begins the task right away (response latnecy = 0); a one (1) is placed in the blank if the child does not start the task immediately (15 seconds response latency).

E-Goal Time: A column for each time interval in the session has been allotted. Only the intervals when the child is working on E's goal should have a number 1 or 2; the others will be blank.
2= Continues tasks for about 100% of the time interval, i.e., with no interruptions (for that 15 second interval)
1= Continues task about 50% of the time interval, i.e., with interruptions (continues task is scored, but either psychological interruption, physical interruption, external distraction, or prolonged emotional dependence is also scored.)

E-Goal Intensity: A column for each time interval in the session has been allotted. Only the intervals when the child is on E's goal should have a number 1, 2, or 3; the others will be blank.

3= High intensity
2= Medium intensity
1= Low intensity

# on E goal: Count the number of intervals the child is on E-goal.
01 = on E's goal one interval
02 = one E's goal two intervals
etc. through
10 = on E's goal 10 intervals

C-Goal time: A column for each time interval in the session has been allotted. Only the intervals when the child is working on C's goal should have a number 1 or 2; the others will be blank.

2 = Continues task about 100% of time, i.e., with no interruptions
1 = Continues task about 50% of time, i.e., with interruptions (see E's goal time directions for definitions of interruptions)
blank = working on E's goal

[illegible] intensity. [illegible] each time interval in the session has been allotted. Only the intervals when the child is on C's goal should have a number 1, 2, or 3; the others will be blank.

3 = high intensity
2= medium intensity
1 = low intensity

on C Goal: Count the number of intervals the child is on C-goal. (Only one column has been allotted because it's so rare to be on C's goal all intervals. 10 = 9 for this variable.)

1=on C's goal one interval
2=on C's goal two intervals
etc. through
9=on C's goal 9 or 10 intervals

Affect: A column for each time interval in the session has been allotted.

7 = beaming smiles
6 = smiles
5 = pleased or pleasant
4 = neutral
3 = displeased
2 = precry
1 = cry

The rest of the variables simply involve counting the number of intervals in which they occur. Only one column has been allotted for most of them, and if a 10 should be obtained, code it as a 9. Where the likelihood of 10 is quite high, two columns have been allotted. They should be scored as follows:

Instru M: 01
.
.
.
10

Emot M: 01
.
.
.
10

Flexibility:
1 = Inflexible
2 = Flexible
3 = Very flexible

Familiarity:
1 = Unfamiliar
2 = Familiar

When counting the number of intervals for emotional dependency, etc., ✓✓ = ✓. The only time it makes a difference is in determining whether a 1 or 2 should be coded for goal time (✓= 1 on goal time).

Trust in Stranger—Summary Scoring Form

Appendix G-2

Name of Child _____ _______ (I-2) **Age of Child** ___ ___ (3-4) **Race** _______ (5)

Sex _____ (6) **S-E** ______ (7) **E-Name** _____________ (8) **Area** _________ (9)

1.	1	pos.___(10) neg.___ ___(11-12)
	2	pos.___(13) neg.___ ___(14-15)
2.	1	pos.___(16) neg.___ ___(17-18)
	2	pos.___(19) neg.___ ___(20-21)
3.	1	pos.___(22) neg.___ ___(23-24)
	2	pos.___(25) neg. (26-27)
	3	pos.___(28) neg.___ ___(29-30)
4.	1	pos.___(31) neg.___ ___(32-33)
	2	pos.___(34) neg.___ ___(35-36)
	3	pos.___(37) neg.___ ___(38-39)
5.	2	pos.___(40) neg.___ ___(41-42)
	4	pos.___(43) neg.___ ___(44-45)
	1(b)	no pos. neg.___ ___(46-47)
6.	5	pos.___(48) neg.___ ___(49-50)
	1(b)	no pos. neg.___ ___(51-52)
7.	2	pos.___(53) neg.___ ___(54-55)

8.	6	pos.___(56) neg.___ ___(57-58)
9.	2	pos.___(59) neg.___ ___(60-61)
	7	pos.___(62) no neg.
	8	pos.___(63) no. neg. no. score
10.	1	pos.___(64) no. neg.
	2	pos.___(65) neg.___ ___(66-67)
	3	pos.___(68) neg.___ ___(69-70)
11.	1	pos.___(71) no. neg.
	2	pos.___(72) neg.___ ___(73-74)
	3	pos.___(75) neg.___ ___(76-77)
12.	2	pos.___(10) CARD 2 neg.___ ___(11-12)
	4	pos.___(13) neg.___ ___(14-15)
13.	5	pos.___(16) neg.___ ___(17-18)
14.	6	pos.___(19) neg.___ ___(20-21)

15.	2	pos.___(22) neg.___ ___(23-24)
	7	pos.___(25) no neg.
	8	pos.___(26) no. neg. no. score
16.	1	pos.___(27) no neg.
	2	pos.___(28) neg.___ ___(29-30)

12 month item only:XYLOPHONE

17.	9	pos.___(31) neg.___ ___(32-33)

6 + 12 months: Controlling environment

Rating_______(34)

Appendix [illegible]

24-Month Trust Summary Coding Form

Name of Child _______ _______(1-2) **Age of Child** _____ _____(3-4) **Race** _____(5)

Sex_____(6) **S-E**_____(7) **E-Name**______________(8) **Area** ____________(9)

---

1. A pos._____(10)
neg._____ _____(11-12)

B _____(13)

C _____(14)

2. A pos._____(15)
neg._____ _____(16-17)

B _____(18)

C _____(19)

3. A _____(20)

B pos._____(21)
neg._____ _____ (22-23)

C _____(24)

D _____(25)

4. A _____(26)

B pos._____(27)
neg._____ _____(28-29)

C _____(30)

5. A _____(31)

B pos._____(32)
neg._____ _____(33-34)

C _____(35)

6. A _____(36)

B pos._____(37)
neg._____ _____(38-39)

C _____(40)

7. A _____(41)

B pos._____(42)
neg._____ _____ (43-44)

C _____(45)

8. A _____(46)

B pos._____(47)
neg._____ _____(48-49)

C _____(50)

9 (B) A _____(51)

B _____(52)

C pos._____(53)
neg._____ _____(54-55)

D _____(56)

9 (M) A _____(57)

B _____(58)

C pos._____(59)
neg._____ _____(60-61)

D _____(62)

Appendix G-4

36 and 48 Month Trust Summary Coding Form

Name of Child_____ _____(1-2) Age of Child_____ _____(3-4) Race_____(5)

Sex _____(6) S-E_____(7) E-Name__________(8) Area______________(9)

---

1. A pos._____(10)
neg._____ _____(11-12)

B _____(13)

---

2. A _____(14)

B pos. _____(15)
neg._____ _____(16-17)

C _____(18)

---

4. A pos._____(19)
neg._____ _____(20-21)

B _____(22)

C _____(23)

---

5. A pos._____(24)
neg._____ _____(25-26)

B _____(27)

C _____(28)

D _____(29)

---

6. A pos._____(30)
neg._____ _____(31-32)

B _____(33)

C _____(34)

7.(E) A; pos._____(35)
neg._____ _____(36-37)

B _____(38)

C _____(39)

8(E) A pos._____(40)
neg._____ _____(41-42)

B _____(43)

C _____(44)

9(E) A pos._____(45)
neg._____ _____(46-47)

B _____(48)

C _____(49)

---

10. A pos._____(50)
neg._____ _____(51-52)

B _____(53)

C _____(54)

---

7 (M) A pos._____(55)
neg._____ _____(56-57)

B _____(58)

C _____(59)

---

8 (M) A pos._____(60)
neg._____ _____(61-62)

B _____(63)

C _____(64)

---

9 (M) A pos._____(65)
neg._____ _____(66-67)

B_____(68)

C_____(69)

Appendix G-5

Persistence Summary Coding Form--24, 36, and 48 months

Name of Child_____ _______(1-2) Age of Child___ _____(3-4) Race_____(5)

Sex______(6) S-E______(7) E-Name____________(8) Area_______(9)

KEYS: Task Code 1 (10) Response Latency________________(11)

E-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (12-21)

E-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (22-31)
1 2 3 4 5 6 7 8 9 10

#on E-Goal ___ ____(32-33)

C-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (34-43)

C-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (44-53)
1 2 3 4 5 6 7 8 9 10

# on C-Goal____(54)

Affect ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (55-64)
1 2 3 4 5 6 7 8 9 10

# Psych______ (65) #Phys____(66) # Exter ______(67)

# Instru E_______(69) #Instru M____ ___(70-71) # Emot E ____(72)

# Emot M____ ____(73-74) #Glances E____(75) # Glances M _____(76)

# Self-Stim____(77) # # Agg _____(78) Flex _____(79) Famil____(80)

CUPS: Task Code _____(10) Response Latency_____(11)

E-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___(12-21)

E-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___(22-31)
1 2 3 4 5 6 7 8 9 10

# on E-Goal____ ____(32-33)

C-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (34-43)

C-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (44-53)
1 2 3 4 5 6 7 8 9 10

# on C-Goal ____(54)

Affect ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (55)
1 2 3 4 5 6 7 8 9 10

# Psych____(65) # Phys____(66) # Exter ______(67) # Compl_____(68)

# Instru E _____(69) # Instru M ___ ___(70-71) # Emot E______(72)

#Emot M ___ ___(73-74) # Glances E ____(75) # Glances M ____(76)

# Self-Stim____(77) # Agg____(78) Flex ____(79) Famil ____(80)

PUZZLES: Task Code ____(10) Response Latency ____(11)

E-Goal Time ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ (12-21)

E-Goal Intensity ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ (22-31)
1 2 3 4 5 6 7 8 9 10

# on E-Goal___ ___(32-33)

C-Goal Time ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ (34-43)

C-Goal intensity ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ (44-53)
1 2 3 4 5 6 7 8 9 10

# on C-Goal ____(54)

Affect ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ (55-64)
1 2 3 4 5 6 7 8 9 10

# Psych____(65) # Phys _____(66) # Exter _____(67)

# Instru E ____(69) # Instru M ___ ___(70-71) # Emot E ____(72)

Emot M___ ___(73-74) # Glances E____(75) # Glances M ____(76)

Self-Stim____(77) # Agg____(78) Flex_____(79) Famil____(80)

BOOKS: Task Code____(10) Response Latency_____(11)

E-Goal time ____ ____ ____ ____ ____ ____(12-17)

E-goal intensity ____ ____ ____ ____ ____ ____(22-27)

# on E-Goal ___ ___(32-33)

C-Goal tire ____ ____ ____ ____ ____ ____ (34-39)

C-Goal intensity ____ ____ ____ ____ ____ ____ (44-49)
1 2 3 4 5 6

# on C-Goal____(54)

Affect ____ ____ ____ ____ ____ ____(55-60)
1 2 3 4 5 6

# Psych_____(65) # Phys ____(66) # Exter____(67) #Comple ____(68)

# Instru E___(69) # Instru M ___ ___(70-71) # Emot E ____(72)

Emot M ___ ___(73-74) # Glances E____(75) # Glances M ____(76)

Self-Stim____(77) # Agg_____(78) Flex_____(79) Famil_____(80)

CANDY: Task Code____(10) Response Latency____(11)

E-goal time ___ ___ ___ ___(12-15)

E-Goal Intensity ___ ___ ___ ___(22-25)
1 2 3 4

# on E-goal___ ___(32-33)

C-goal time ___ ___ ___ ___(34-37)

C-goal intensity ___ ___ ___ ___(44-47)
1 2 3 4

on C-goal____(54)

Affect ___ ___ ___ ___(55-58)
1 2 3 4

Psych____(65) # Phys ____(66) # Exter____(67) # Compl____(68)

Instru E____(69) # Instru M ___ ___(70-71) # Emot E ____(72)

Emot M___ ___(73-74) # Glances E ____(75) #Glances M ____(76)

Self-Stim____(77) # Agg____(78) Flex____(79) Famil____(80)

Appendix G-6

Coding Sheet-- Persistence 24 and 36 Months

Name of Child_____ _______(1-2) Age of Child____ _____(3-4) Race_____(5)

Sex______(6) S-E______(7) E-Name____________(8) Area_______(9)

KEYS: Task Code 1 (10) Response Latency________________(11)

E-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (12-21)

E-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (22-31)
1 2 3 4 5 6 7 8 9 10

#on E-Goal ____ ____(32-33)

C-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (34-43)

C-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (44-53)
1 2 3 4 5 6 7 8 9 10

# on C-Goal____(54)

Affect ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (55-64)
1 2 3 4 5 6 7 8 9 10

# Psych______ (65) #Phys____(66) # Exter ______(67)

# Instru E_______(69) #Instru M____ ____(70-71) # Emot E ____(72)

# Emot M____ ____(73-74) #Glances E____(75) # Glances M _____(76)

# Self-Stim____(77) # # Agg _____(78) Flex _____(79) Famil____(80)

CUPS: Task Code _____(10) Response Latency_____(11)

E-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___(12-21)

E-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___(22-31)
1 2 3 4 5 6 7 8 9 10

# on E-Goal____ ____(32-33)

C-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (34-43)

C-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (44-53)
1 2 3 4 5 6 7 8 9 10

# on C-Goal ____(54)

Affect ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (55)
1 2 3 4 5 6 7 8 9 10

# Psych____(65) # Phys____(66) # Exter ______(67) # Compl_____(68)

# Instru E _____(69) # Instru M ___ ___(70-71) # Emot E______(72)

#Emot M ___ ___(73-74) # Glances E ____(75) # Glances M ____(76)

# Self-Stim____(77) # Agg____(78) Flex ____(79) Famil ____(80)

PUZZLES: Task Code ____(10) Response Latency ____(11)

E-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (12-21)

E-Goal Intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (22-31)
1 2 3 4 5 6 7 8 9 10

# on E-Goal___ ___(32-33)

C-Goal Time ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (34-43)

C-Goal intensity ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (44-53)
1 2 3 4 5 6 7 8 9 10

# on C-Goal ____(54)

Affect ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (55-64)
1 2 3 4 5 6 7 8 9 10

# Psych____(65) # Phys _____(66) # Exter _____(67)

# Instru E ____(69) # Instru M ___ ___(70-71) # Emot E ____(72)

# Emot M___ ___(73-74) # Glances E____(75) # Glances M ____(76)

Self-Stim____(77) # Agg ___(78) Flex_____(79) Famil____(80)

BOOKS: Task Code____(10) Response Latency_____(11)

E-Goal time ___ ___ ___ ___ ___ ___(12-17)

E-goal intensity ___ ___ ___ ___ ___ ___(22-27)

# on E-Goal ___ ___(32-33)

C-Goal time ___ ___ ___ ___ ___ ___ (34-39)

C-Goal intensity ___ ___ ___ ___ ___ ___ (44-49)
1 2 3 4 5 6

# on C-Goal____(54)

Affect ___ ___ ___ ___ ___ ___(55-60)
1 2 3 4 5 6

# Psych_____(65) # Phys ____(66) # Exter____(67) #Comple ____(68)

# Instru E___(69) # Instru M ___ ___(70-71) # Emot E ____(72)

# Emot M ___ ___(73-74) # Glances E____(75) # Glances M ____(76)

Self-Stim____(77) # Agg_____(78) Flex_____(79) Famil_____(80)

CANDY: Task Code____(10)   Response Latency____(11)

E-goal time ___ ___ ___ ___(12-15)

E-Goal Intensity ___ ___ ___ ___(22-25)
1 2 3 4

on E-goal___ ___(32-33)

C-goal time ___ ___ ___ ___(34-37)

C-goal intensity ___ ___ ___ ___(44-47)
1 2 3 4

# on C-goal____(54)

Affect ___ ___ ___ ___(55-58)
1 2 3 4

# Psych____(65)   # Phys ____(66)   # Exter____(67)   # Compl____(68)

Instru E____(69)   # Instru M ___ ___(70-71)   # Emot E ____(72)

Emot M___ ___(73-74)   # Glances E ____(75)   #Glances M ____(76)

# Self-Stim____(77)   # Agg____(78)   Flex____(79)   Famil____(80)

BIBLIOGRAPHY

References

Ainsworth, M. D., Bell, & Stayton, D. Individual differences in strange-situation behavior of one-year-olds. In H. R. Shaffer (Ed.), *The origins of human social relations*. London: Academic Press, 1972.

Ainsworth, M., & Bell, S. Attachment exploration, and separation: Illustrated by the behavior of one-year-olds in a strange stiuation. *Child Development*, 1970, *41*, 49-67.

Bell, S. The development of the concept of object as related to infant-mother attachment. *Child Development*, 1970, *41*, 291-311.

Beller, E. K. Introducing a research atmosphere. *Journal of Social Services Quarterly*, 1954, *31*, 180-186.

Beller, E. K. Exploratory studies of dependency. *Transactions*, 1959, *21*, 414-426.

Beller, E. K. Direct and inferential observations in the study of children. *American Journal of Orthopsychiatry*, 1959, *29*, 560-573.

Beller, E. K. Intellectual development of educationally disadvantaged children, *Significant Issues in Reading*, 1966, *4*, 73-83.

Beller, E. K. Adult-child interaction and personalized day care. In E. Grotberg (Ed.), *Day care: Resources for decisions*. Office of Economic Opportunity, 1971, 229-264.

Beller, E. K. Research on organized programs in early education. In R. Travers (Ed.), *Handbook for research and teaching*. New York: Rand McNally, 1973.

Beller, E. K. Teacher evaluation: Why, what and how! *Peabody Journal of Education*, 1971, *43* (No. 2), 125-139. Also in *Accountability in American Education*, F. (Ed.). Boston: Allyn and Bacon, 1973.

Beller, E. K. Early intervention programs. In J. Osofsky (Ed.), *Handbook of infant development*. New York: Wiley & Sons (in press).

Messer, S., & Lewis, M. Social class and sex differences in the attachment and play behavior of the year old infant. *Merrill-Palmer Quarterly*, in press.

Lewis, M., & Ban, P. Stability of attachment behavior: A transformational analysis. Paper presented at Society for Research in Child Development Meetings, April 1971.

Lewis, M., & Ban, P. Mothers and fathers, girls and boys: Attachment behavior in the one-year-old. Paper presented at the meetings of the Eastern Psychological Association, New York, April 1971.

Goldberg, S., & Lewis, M. Play behavior in the year old infant: Early sex differences. *Child Development*, 1969, *40*, 21-31.

Gordon, I. J., & Jester, R. E. Instructional strategies in infant stimulation. Final report, NIMH, Project # 5-R01-MH-17347-02, Institute for Development of Human Resources, University of Florida, Gainesville, Florida, May 1972.

Hartup, W., & Keller, E. Nurturance in preschool children and its relation to dependency. *Child Development*, 1960, *31*, 681-689.

Keller, E. Nurturance and its relation to dependency. Unpublished master's thesis, University of Iowa, 1959.

Heathers, G. Emotional dependence and independence. *The Journal of Genetic Psychology*, 1955, *87*, 37-57.

Kohn, M., & Rosman, B. A social competence scale and symptom checklist for the preschool child. *Developmental Psychology*, 1972, *6*, 430-444.

Kohn, M., & Rosman, B. Relationship of preschool social-emotional functioning to later intellectual achievement. *Developmental Psychology*, 1972, *6*, 445-452.

Levine, S., Elzey, F., Lewis, M. California Preschool Social Competency Scale. Consulting Psychologists Press, Inc.: Palo Alto, California.

Lewis, M. & Brooks-Gunn, J. Self, other and fear. Unpublished manuscript, Educational Testing Service, Princeton, New Jersey, 1972.

Maccoby, E., & Feldman, S. Mother attachment and stranger reactions in the third year of life. *Monographs of the Society of Research in Child Development*. (In press.)

Parten, M. Social participation among preschool children. *Journal of Abnormal and Social Psychology*, 1932, *27*, 243-269.

Ricciuti, H. Recognition and attachment study. Unpublished manuscript.

Robson, K., Pedersen, F., & Moss, H. A. Developmental observations of diadic gazing in relation to the fear of strangers and social approach behavior. *Child Development*, 1969, *2*, 40.

Scarr, S., & Salapatek, P. Patterns of fear development during infancy. *Merrill-Palmer Quarterly*, 1970, 53-90.

Fowler, M. *Demonstration program in infant care and education*. Final report, August 1971.

Schaefer, E., & Aaronson, M. Infant behavior inventory. Laboratory of Psychology, National Institute of Mental Health, U.S. Dept. HEW, (unpublished) 1967.

Schwarz, J., & Wynn, R. Starting nursery school, II: Prediction of children's initial emotional reactions from background information. Final Report, November, 1970.

Severy, L., & Davis, K. Helping behavior among normal and retarded children. *Child Development*, 1971, *42*, 1017-1031.

Stott, D. H., & Sharp, J. D. Effectiveness motivation scale. Unpublished paper.

Watts, J., & Barnett, I. Environments compared, Chapter IX. Prepublication mimeographed manuscript, 1971.

Wenar, C. Executive competence and spontaneous social behavior in one-year-olds. *Child Development*, 1972, *43*, 256-260.

Yarrow, M., Waxler, C., & Scott, P. Child effects on adult behavior. *Developmental Psychology*, 1971, *5*, 300-311.

Yarrow, M., & Scott, P. Imitation of nurturant and nonnurturant models. *Journal of Personality and Social Psychology*, in press.

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